

[music] [pop captions up]

**leo:** oh-oh facebook fever has struck "the lab". hello, how are you? good to see you. it's time for "the lab". this is the show where we have, help you understand how technology works, everything from facebook and the internet. [pop captions down]

**leo:** that's what kate's gonna do for us in a little bit. are you a facebook fanatic?

**kate:** i am an absolute hound for facebook.

**leo:** isn't that funny? i don't know why but it just caught on big time.

**kate:** yeah.

**leo:** big time all of a sudden. the kids have always been into it and now us old folks. i don't want to include you in that group are into it too. we're gonna talk about turning your alarm clock into a usb device. i don't know why. but we'll find out. frank linhares is here our resident hacker. we've got gadgets with sean. we've got raj brar who's gonna show us a way to make a little bit money and help you use your, search your site better too. at the same time also a lot of callers. this is episode of "the lab with leo". i am leo leporte. i forgot to say that. hi. how are you? hi good to see you. you can tell me it's me cause i'm on the mug right. so thanks for the clipboard.

**kate:** you're welcome.

**leo:** let's get our first caller on the air.

**kate:** fantastic.

**leo:** yeah.

**kate:** our first caller is jonathan from burnsville in north carolina and he is via skype today.

**leo:** via skype.

**kate:** via skype.

**leo:** hello jonathan. thanks kate. hello jonathan how are you?

**jonathan:** i'm doing good. how are you doing leo?

**leo:** i am wonderful. look at that great picture via skype. it's amazing.

**jonathan:** yep.

**leo:** i love i, i think that skype is probably still i mean maybe its, maybe i'm just a loser. but i, i still get blown away by what we can do here. i mean this was what when i was a kid in 1965 at the world's fair in new york city the, the at&t announced picture phones. we'd all have one by the year 19, 2000. well it took a little bit longer but we actually do and they look great. look at that. what can i do for you today? [pop captions up]

**jonathan:** well me and my buddy and i run a computer repair shop here in western north carolina.

**leo:** cool.

**jonathan:** and from time to time we get people coming in that want some of their data backed up --

**leo:** yeah.

**jonathan:** onto a cd or a dvd.

**leo:** yeah.

**jonathan:** what we're doing we're coming across problems where we're having to sort through and trying to you know so you know we have 6 to 700 megabytes --

**leo:** yes.

**jonathan:** or 4.37 gigabytes. we were wondering if there's a program that we can get that will look at the data that we, that we need backed up and basically automatically split them up you know that will fit onto either a 555 like a cd or a dvd or something like that. [pop captions down]

**leo:** yeah. let me guess i'm gonna channel now and i'm gonna do a little esp. but i'm guessing that the name of your computer company is blue ridge pc repair.

**jonathan:** yeah that's right.

**leo:** yeah it must have something to do with that sign over your head! all right, um that's a, now you have a specific issue that's a little different from a lot of users, which is when you backup you don't want to make decisions about what to backup. you're gonna want to backup everything aren't you?

**jonathan:** right.

**leo:** ah because you know it's your customer's data. you're not, you're not gonna say oh let's save this but not save that. you're gonna want to do something called an image, which is to take the drive and, and take everything on it so that should something happen to the drive should you have to replace it. [pop captions up]

**leo:** should you know there be a fire in the building you have that image and you can always make it exactly like it was and that's what the customer wants right?

**jonathan:** right.

**leo:** actually sometimes the customer doesn't cause its got spyware or viruses or whatever. but this but in the case where you know what's on the drive is okay. this is how you do it. um this is the program i think you want to use. it's wonderful. [pop captions down]

**leo:** it'll do exactly what you want. you know nowadays with drives being you know 160 gigabytes, 250 gigabytes, 500 gigabytes, a terabyte you can't fit it on any optical medium. i mean you only get even with a, with a if you had a blueray burner, which i'm sure you probably don't want to use but even that's i don't know 50 something gigabytes. so you've, you've really got to do what's called spanning it. and this is a program i highly recommend. it's affordable. its called drive snapshot. it comes from drivesnapshot.de. [pop captions up]

**leo:** let me reopen i don't know what happened to my browser. let me reopen this and go there. drivesnapshot.de and it is you can try it for free for 30 days. [pop captions down]

**leo:** but i think you're gonna want to buy it and i think it's only like \$40. um this is exactly what it will do. here's the program here. backup disk to file, this is what you wanted because you want to make something that you could specify the file size. in your case say 650 gigs or megs or 700 megs for a cd or 4.7 gigs for a dvd. and so i'm gonna say i'm gonna take this image and i'm gonna back it up and here's exactly what you can, you can do. you can say how, how, you select a destination file. how big should the file be? you can totally specify all the information you need. you can even um i mean this thing is so if you go to advanced option, options you can say maximum image file size. you can say and they even specify here how big it should be for cds and dvds. you should usually stay below two gigs by the way because as you probably know since you're a computer whiz the two gigabyte limit on a lot of drives and hardware.

**jonathan:** yeah right.

**leo:** file systems is gonna make it anything bigger it's sometimes hard to restore. so i usually never more than two gigs.

**jonathan:** yeah.

**leo:** if it's cd 650 it's a good size.

**jonathan:** okay.

**leo:** um it'll save them as iso files, which you could then burn to cds or dvds.

**jonathan:** okay.

**leo:** um this and by the way it works while windows is running.

**jonathan:** oh wow.

**leo:** which is awesome. you don't have to go out into a, a dos partition. you can it has an explorer that you can look into the files and take individual files out. it does everything you just specified.

**jonathan:** wow okay.

**leo:** i just love this program. it's very affordable. for years i used it i'm sure you did norton ghost now symantec ghost. um ah maybe a acronis true image.

**jonathan:** yeah.

**leo:** but this is, this is the one. this is an awesome program. it doesn't do the spanning automatically. you'll have to ah burn them individually later. so it makes the files the right size and then you burn them.

**jonathan:** now does that program have the option if i've got the computer on the network maybe to dump it over the network or?

**leo:** yeah. yeah.

**jonathan:** oh wow.

**leo:** yeah um if, if you look at this thing its, its obviously written by an enthusiast who really wanted to, to give you everything, you know exactly somebody like us.

**jonathan:** right.

**leo:** who wanted to, who wanted to give you all of the capabilities. they have a this is the disk image explorer that will allow you to go through it. you can restore with windows but you can also restore with dos or a dos boot disk. it has command line options as well as windows options.

**jonathan:** really?

**leo:** and this you asked about remote backup. it will go over a, a network. this is the instruction to do this. so this is --

**jonathan:** does that work with windows vista as well?

**leo:** yes it does. now it says here that you're gonna use r-console, which i don't know if r-console this is for the network thing. i'm not sure well yeah you know it will work with vista in, in all respects because you don't have to use r- console. this is just one way to do it. yeah, yeah i've used it with vista. it works great.

**jonathan:** great. okay.

**leo:** all versions of windows. drivesnapshot.de and you know i have to give credit where credit's due. this is a, a steve gibson recommendation. he is my personal guru of the hard drive and this is what he uses so that's when i said oh i have to try this. all right jonathan?

**jonathan:** all right. hey can we, can we get a couple of autographs for the shop -- [both talking at once]

**leo:** sure. hang on the line. we'll get your address we'll send you out some stuff.

**jonathan:** great thanks leo.

**leo:** hey thanks jonathan and everybody in north carolina should go to blue ridge pc computer. who's that behind you?

**jonathan:** that was dave my other friend.

**leo:** go see dave and jonathan at blue ridge pc computer repair. thanks, take care jonathan.

**jonathan:** thanks.

**leo:** bye-bye. we're gonna take a break. coming up frank linhares. he is our resident hacker. why? he says why do alarm clocks not have usb ports? i don't know. but he's gonna show how to put one on. you might want to stay tuned for this too jonathan. we'll be right back right after this. [music] [commercial break] [music]

**leo:** welcome back to "the lab with leo". frank linhares is the chief troublemaker at digital underground.tv which is a video podcast do it all about the underground hacking and so forth. took a part in iphone.

**frank linhares:** yeah, yeah.

**leo:** you crazy guys. you wild and wacky guys. now he's gonna show us something that i, i think has absolutely no use. but what the heck? do it cause you can. he put a usb port on a alarm clock. i give, why do you need an alarm a usb port on your alarm clock?

**frank linhares:** i go to bed every night, i listen to my ipod.

**leo:** so do i you know. [pop captions up]

**leo:** that's a that we have some things in common yes.

**frank linhares:** but i listen to my ipod.

**leo:** oh yes so do i.

**frank linhares:** i wake up every morning.

**leo:** yeah.

**frank linhares:** and what? my ipod's dead. [pop captions down]

**leo:** oh yeah.

**frank linhares:** so --

**leo:** oh this is for charging?

**frank linhares:** it's for charging anything. my wife suggested it to me.

**leo:** this sounds really risky.

**frank linhares:** well it can be if you don't know what you're doing you have to be real careful. [leo laughing]

**leo:** okay.

**frank linhares:** so my wife suggested why you know you put usb ports in everything else.

**leo:** yeah.

**frank linhares:** want don't you put one in the alarm clock? cause you --

**leo:** your wife thought this up?

**frank linhares:** my wife thought this up.

**leo:** now by the way i want to apologize to frank's wife who may not have arisen on time this morning cause he has the alarm clock.

**frank linhares:** yeah i've actually got her alarm clock here.

**leo:** did you have any trouble getting this through the, the security?

**frank linhares:** absolutely none whatsoever. they ah --

**leo:** it's in frank's adventures in airport security. every time he comes out here with this stuff --

**frank linhares:** yeah, but - - [both talking at once]

**leo:** but this time they didn't, they didn't notice there was a, a two usb ports. [both talking at once]

**frank linhares:** no they didn't notice that there were two usb ports. i guess it was just cut so cleanly -- [both talking at once]

**leo:** wait a minute. show em this. this is great. you don't expect that on an alarm clock. wow that's really cool. all right, so that's for charging. it's not for its not an input port.

**frank linhares:** it's not an in port.

**leo:** okay.

**frank linhares:** it's strictly charging only.

**leo:** okay.

**frank linhares:** now if you want to do this at home it's actually quite simple. you need to make sure though one of the prerequisites you need is an alarm clock with a power supply that is anywhere between nine volts to 12 volts dc. that's the --

**leo:** is there a way to know that?

**frank linhares:** not beforehand. some of them, some of them --

**leo:** they might say on the, on the --

**frank linhares:** might say, most of them don't though.

**leo:** label, okay.

**frank linhares:** but you know what? most of them are. most of them --

**leo:** okay.

**frank linhares:** if usually it contains a battery backup device.

**leo:** yeah.

**frank linhares:** then it usually nine volts dc.

**leo:** okay, okay.

**frank linhares:** cause that's how --

**leo:** okay.

**frank linhares:** the backup unit works.

**leo:** yeah.

**frank linhares:** so it's a very simple procedure once we are able to snap all this off.

**leo:** and is it pretty straightforward getting into most alarm clocks?

**frank linhares:** very, very, very straightforward.

**leo:** all right.

**frank linhares:** what you want to do is you want to take a little multimeter and you kind of want to just fiddle around --

**leo:** i love this. [laughs]

**frank linhares:** until you find the actual power source.

**leo:** okay.

**frank linhares:** internally in the alarm clock.

**leo:** okay.

**frank linhares:** which in this unit happened to be there. and you're gonna want to --

**leo:** wait a minute, let's get, let's get a good shot cause your arm is in the way here. we're over at this camera right here.

**frank linhares:** right there. i don't actually want to touch it unless you want to call an ambulance for me.

**leo:** don't touch it. is it plugged in?

**frank linhares:** it's plugged in right now yeah.

**leo:** well what are you, what are you crazy?

**frank linhares:** i'm a trained professional. don't try this at home. um --

**leo:** unplug the alarm clock before you do this. [pop captions up]

**frank linhares:** and the key to all this is something called the 7805 voltage regulator.

**leo:** okay.

**frank linhares:** that's, that's this little thing. what this little thing does --

**leo:** now you can buy that at electronic stores?

**frank linhares:** anywhere from radio shack to any of your local electronic stores. [pop captions down]

**frank linhares:** and what this thing does is it takes anywhere between 9 volts to 12 volts dc and steps it down to 5 volts dc.

**leo:** and that's what you need for the ipod.

**frank linhares:** which is the -- that's right.

**leo:** or for actually for, for any usb.

**frank linhares:** any, any usb device. [both talking at once]

**leo:** okay.

**frank linhares:** that's the actual --

**leo:** so this will charge any usb device that gets charged over the year.

**frank linhares:** any usb device.

**leo:** okay.

**frank linhares:** you take your little usb device.

**leo:** you plug it in there.

**frank linhares:** you plug it in one of these ports.

**leo:** and look it's charging.

**frank linhares:** and there you go.

**leo:** it says, it says --

**frank linhares:** if you can see it.

**leo:** it says its charging. so this you're taking the power from the transformer.

**frank linhares:** from the transformer.

**leo:** and you're running it through the step. but you have to split it right so that the power still goes to the clock?

**frank linhares:** well yeah you just find the actual contact points right there. i'm not actually removing any of the internal wiring. i'm just adding a, a positive and a negative wire that go to the 7805 on the actual power - - ports. [both talking at once]

**leo:** so let me, let me, let me point out what you're doing. so cause your arm, you're, you're getting in the way. so where, where is it?

**frank linhares:** it's right there.

**leo:** this is, this is the two contact points right there? [both talking at once]

**frank linhares:** those are the two contact points. actually on this board its clearly labelled, dc-positive and dc-negative. so it wasn't a very hard thing to figure out.

**leo:** so the red and the black.

**frank linhares:** that's right.

**leo:** red is positive, black is negative.

**frank linhares:** that's right.

**leo:** right.

**frank linhares:** it comes into the 7805 voltage regulator.

**leo:** the voltage regulator there. can you zoom in a little bit so that we can see that a little bit better? i don't know if you can. i don't know. there you go. so that's all that is, is that little thing that's a step down?

**frank linhares:** it's like 15 cents to buy.

**leo:** okay cool. and then so you're splitting it and then the second thing will go to these, these usb ports.

**frank linhares:** that's right.

**leo:** now what, where, what is how do you where do you get that same place?

**frank linhares:** same electronic stores. i mean it's not a -- [both talking at once]

**leo:** and how, and how did you cut a hole in your clock?

**frank linhares:** with a, a - - [both talking at once]

**leo:** a --

**frank linhares:** no a sharp knife actually.

**leo:** no? a sharp knife.

**frank linhares:** yeah a very sharp knife.

**leo:** a hunting knife.

**frank linhares:** well yeah.

**leo:** okay.

**frank linhares:** yeah a very sharp knife yes.

**leo:** and, and so you cut the, the square out here.

**frank linhares:** that's right.

**leo:** and then this is a compression fitting?

**frank linhares:** that's right, its got cause you can tell the little ridges on either side that actually lock it into place right there.

**leo:** so you don't actually have to glue it or anything like that.

**frank linhares:** you might want to --

**leo:** just by, by snapping it in it holds it in place.

**frank linhares:** if you want to make sure it doesn't come flying out.

**leo:** yeah cause you do, you do put some you know put pressure on that pulling it and stuff.

**frank linhares:** that's right.

**leo:** so total cost? a buck 50.

**frank linhares:** a buck 25 yeah. [leo laughing]

**frank linhares:** a buck 25.

**leo:** total satisfaction, 100%. when you plug in your ipod and it's charging --

**frank linhares:** or cell phone or iphone, anything. [pop captions up]

**leo:** anything.

**frank linhares:** anything.

**leo:** yeah.

**frank linhares:** anything.

**leo:** that's right i could charge my iphone.

**frank linhares:** that's right and never wake up with a dead --

**leo:** that's really cool.

**frank linhares:** ipod again.

**leo:** all right now i know all that went a little bit fast. we also want to make sure that this, this is only for people who have some experience with this kind of thing. [pop captions down]

**leo:** there will be sauldering involved.

**frank linhares:** that's right.

**leo:** don't, not for, not for young children unsupervised. ah you'll also be fooling around with power ac power, which can blow you across the room and kill you. so be very careful but --

**frank linhares:** yeah, my hair, my hair isn't naturally like this.

**leo:** it's usually pretty flat.

**frank linhares:** yeah.

**leo:** details online at thelabwithleo.com. [pop captions up]

**leo:** frank linhares loves to hack things and you can see anybody who would put a usb port in his alarm clock clearly has an, an issue of some kind. i'm quite frightened to figure out what that is. thanks frank we'll see you soon. he's gonna come back with more hacks for us. meanwhile let's take a look at something very, very close up and figure out what the tech it is? what is this? hmm something commonly found around "the lab". we'll zoom out and find out when "the lab with leo" continues. you stay right here. [music] [pop captions down] [commercial break] [music] [pop captions up]

**leo:** closeup of i'm thinking that is a phono cartridge for a turntable. let's zoom out. hey i got it right! i finally got one! it's a -- [blank for boards] [pop captions down]

**leo:** and it looks like a stan freberg record next to that.

**sean carruthers:** yeah it was.

**leo:** is that your actual record here?

**sean carruthers:** that was my turntable and my --

**leo:** hey your turntable i figured.

**sean carruthers:** stan freberg record.

**leo:** wow that's pretty cool. sean carruthers does those closeups. he thought he'd get me on that one cause it was so obscure. but the truth is it's the older ones that i get its not the newer ones. i'm an old timer.

**sean carruthers:** so noted.

**leo:** he's clever. he's clever. let's get another call. kate abraham's lined somebody up from australia.

**kate:** we do. from sydney we have bruce.

**leo:** hey bruce how are you?

**bruce:** good day leo. i'm really good. thanks mate.

**leo:** what, what time is it now in sydney? [pop captions up]

**bruce:** ooh it's rather early. it's around about 20 past 3 in the morning.

**leo:** oh dude i'm so sorry. i am so sorry.

**bruce:** that's okay.

**leo:** thank you for getting up so early and joining us today.

**bruce:** my pleasure leo. [pop captions down]

**bruce:** i've been a long time watcher of the, the various shows and loving "the lab" and everyone's enjoying it on the how-to channel down here in australia.

**leo:** well yeah we really thank how-to for bringing us to australia. and we're hoping to come down maybe early next year and visit everybody cause i've, i've never been --

**bruce:** that would be cool.

**leo:** and i'm just dying to go. [both talking at once]

**leo:** well we're gonna go in the summer though if you don't mind.

**bruce:** yes do, do the summer not the winter.

**leo:** yeah we're, we're, we're waiting till the summer comes. what can i do for you bruce?

**bruce:** well look it's probably a fairly simple question for a man of your knowledge leo. [pop captions up]

**bruce:** i've got a, a fairly aging hp pavillion desktop pc that came preinstalled with windows xp on it.

**leo:** right.

**bruce:** and you know as the, as the good new owner way back when i purchased the machine i, i started creating a set of install disks that bailed out partway through that process. [pop captions down]

**bruce:** um over the years i've watched you and the guys talk about cleaning up your, your windows xp machines when they start to slow down and getting rid of all the crap. and i'd kind of like to do that. but when i go in there to create the install disks it wants me to start with disk number 2 --

**leo:** ooh.

**bruce:** and i can't find disk number 1 anywhere.

**leo:** got it.

**bruce:** so i'm just wondering if there's a, a legitimate way for me to either reset that, that counter so i can go back and start from just number 1 and, and create a new set or somehow get a legitimate copy of, of xp. so that i can clean the machine up and, and get it back to running at a, at a reasonable speed.

**leo:** all of this comes from microsoft's deathly fear of you stealing from them and so as a result they put these draconian restrictions. [pop captions up]

**leo:** for instance they charge less for windows if the computer manufacturer doesn't bundle a windows install disk. that's why so many, so many computers come without a windows install disk. and by the way in my opinion that's a very, very bad idea and you're running up against the problems. so when you get that new computer sometimes they say oh you can make a windows install disk. just run you know create your recovery disk set cause we've got it on the hard drive here. [pop captions down]

**leo:** but --

**bruce:** yeah.

**leo:** there are very strict rules about that. you can make one and only one set. so what if something goes wrong or in your case you stopped and you've lost the first disk or you know you lose the set of disks you're out of luck. they're very clear. hp's very clear and i checked with them on this. you may only build one and only one recovery disk set. and now having started it won't let you go back and start over again.

**bruce:** okay.

**leo:** you have to, you have to you know complete it and, and so basically you're out of luck legitimately you know if you want to do it hp's way. now in my opinion you ought to, you ought to have a copy of windows. you may, you, you, you bought windows. it's just that they didn't see fit to make a disk for you. and again it's microsoft's fear that you're gonna steal it that limits what h, you know what hp can do. they, they microsoft says they no we got to make sure they only make one set, cause you don't want to make a set for your friends. so here's my suggestion. first of all almost any xp install disk will work. so if you have a friend or another computer. a guy down the street, a friendly computer store that will lend you a disk. you use your serial number but most of the time those disks will work. you, you try to find one that's of the same vintage that would work best. alternately you could say at this point well i, i'm gonna buy a copy of xp. and by the way you can get em pretty cheap now that vista's out. you can get em on ebay fairly cheaply. um but you cannot go back and recreate that recovery set. that's lost. so if there's stuff for instance that came with your hp pavillion that you want to keep you're out of luck. you're gonna have to find copies of those somewhere else or buy copies of those. you cannot recreate that disk set and that's microsoft's doing. or you know i shouldn't blame microsoft entirely it's also hp because they, they decided to make a cheap computer and kind of shave a few bucks off by not including a disk. i think they should include a disk. now you might be able to call hp and this is another option and, and plead with them. and say look this is what happened and they probably have a procedure where they will for a nominal fee send you a replacement set. so you might check with them as well.

**bruce:** okay.

**leo:** but there's no way to reset it. [both talking at once]

**leo:** that would be my first instinct too and i've checked and you can't. [pop captions up]

**bruce:** okay i'll certainly do that. in the, the meantime i've turned the machine into jill boot and i've loaded up ubuntu which i --

**leo:** yeah right on. [laughs]

**bruce:** absolutely love.

**leo:** there you go.

**bruce:** and i've been having a lot of fun with that. and if it wasn't for the investment i've got in some of the other windows software --

**leo:** right.

**bruce:** i wouldn't even bother with it.

**leo:** right. [pop captions down]

**bruce:** but ah thank you for your help.

**leo:** yeah that's what's driving a lot of people to, to free software like, like linux is these draconian copy restrictions ah that, that these companies are imposing really impinge on our ability to use our computers. look we bought these things. it's not like we're trying to steal from microsoft. but they just you know they're so paranoid they're getting in the way of legitimate users. and by the way pirates have no trouble, as i've always said copy, copy restrictions don't in any way impact pirates. they can get around it. it's us. it's the honest users that get in trouble.

**bruce:** yeah that's right.

**leo:** yeah.

**bruce:** that's right.

**leo:** so there you go. i guess we're either forcing you to be dishonest or, or using linux or you know if you really want be honest you can go out and buy another copy of windows. hey thanks jonathan, i mean bruce i'm sorry. thanks for the call i appreciate it. all right you --

**bruce:** thank you leo and thanks for the time.

**leo:** you, you say hi to everybody in sydney too. i really appreciate you're watching the show.

**bruce:** thanks mate.

**leo:** all right, take care, bye-bye. hey let's walk down over here cause it's gadget time. we're gonna start doing this now on, on all our shows. sean carruthers will come up with a cute little gadget. we'll take some time and take a look at it, a brief look at something called the swann.

**sean carruthers:** yeah this --

**leo:** oh i know what this is. no you don't have to tell me. that's a motion sensor like a, for a um --

**sean carruthers:** yeah you just set it off.

**leo:** yeah.

**sean carruthers:** so --

**leo:** right.

**sean carruthers:** now the alarm's going off in the back room.

**leo:** the alarm's going off. it's a motion sensor right?

**sean carruthers:** it is a motion sensor.

**leo:** yes.

**sean carruthers:** but more.

**leo:** but more. there's more.

**sean carruthers:** but more. no what this is, is except it has a motion sensor in it. it looks just like that. [pop captions up]

**leo:** it looks like one of you know a burglar alarm system yeah.

**sean carruthers:** yeah.

**leo:** whoops.

**sean carruthers:** but if you look really carefully inside the log here it's got a little camera here. [pop captions down]

**leo:** oh.

**sean carruthers:** and it's taping you right now.

**leo:** oh that's funny. there's a hole in the swann.

**sean carruthers:** right.

**leo:** so it's a camera but it doesn't look like a camera.

**sean carruthers:** so it's a camera but it doesn't look like a camera. so anyone that's walking by this will think ah it's just a motion sensor.

**leo:** right.

**sean carruthers:** for an alarm system.

**leo:** right.

**sean carruthers:** so they won't think twice about it. but it'll secretly be recording you know once every, every five or ten seconds.

**leo:** so this is a spycam.

**sean carruthers:** so it's a spycam.

**leo:** so let me see what it looks like when you record something.

**sean carruthers:** all right well --

**leo:** so is it recording into the camera or --

**sean carruthers:** it has a, it has a --

**leo:** oh look at this.

**sean carruthers:** a q-card on the side.

**leo:** oh look at that. [both talking at once]

**sean carruthers:** it has a little --

**leo:** oh this is the micro sd, the transflash.

**sean carruthers:** yeah this is, this is a transflash that we threw in there. [pop captions up]

**sean carruthers:** um and it also has a usb port on the side as well that you can use to connect to your computer to --

**leo:** so you could have a direct connection so you could record directly or no? you'd offload it. [pop captions down]

**sean carruthers:** you would offload it.

**leo:** okay.

**sean carruthers:** so it treats it as a messaging device. [both talking at once]

**leo:** so you would need to have some, some memory card.

**sean carruthers:** right.

**leo:** okay.

**sean carruthers:** so there we go. you set that up in a discreet location. you've got the, the power connector first of all that you have to find a, like a plugin. if you want to go wireless you can use this --

**leo:** the battery.

**sean carruthers:** little adaptor for a, for a battery.

**leo:** does it, does it come with that?

**sean carruthers:** it comes with this.

**leo:** okay.

**sean carruthers:** it lasts about eight or nine hours. so it's an overnight solution at best.

**leo:** right, all right.

**sean carruthers:** so we took some shots with this thing earlier while we were setting up. so we've got this going on over here. just that --

**leo:** so it's one shot every how many seconds?

**sean carruthers:** well as soon as it detects motion it'll snap a picture.

**leo:** okay.

**sean carruthers:** and then every five to ten seconds.

**leo:** okay. so as long as there's motion it takes another picture.

**sean carruthers:** so if there's nothing happening overnight in your area --

**leo:** oh this is very useful.

**sean carruthers:** no pictures so.

**leo:** see i saw this thing and i came over and i was a little puzzled by it because i'd, it looks like we added some security system. look at this. you can tell everything that's going on in "the lab" which is by the way not much.

**sean carruthers:** well we're all scurrying around getting things set.

**leo:** you were all waiting for me. i know what happened. [laughs]

**leo:** i was a little late this morning.

**sean carruthers:** see me?

**leo:** oh look at that. that's very cool.

**sean carruthers:** so there's ah --

**leo:** this is from swann? how much is it?

**sean carruthers:** it's 199 u.s. at swannsecurity.com and you can find out more at our shownotes at labwithleo.com.

**leo:** and that's our gadget of the day.

**sean carruthers:** our gadget of the day.

**leo:** it comes from sean carruthers the swann.

**sean carruthers:** the swann. [pop captions up]

**leo:** all right we're gonna take a break, come back with more of your calls in just a little bit. also kate abraham she's gonna show us how to spiff up your facebook page. she's got the facebook dts bad. stay right here. oh hey right now it's time to take our quiz question of the day. i forgot. let's not forget that. what is our quiz question of the day? what is, who was the creator who started this whole facebook nonsense? was it -- [blank for boards]

**leo:** i think it was amber actually. go to, go to the website take a guess. we'll come back a little bit later and tell you exactly who started facebook. you stay right here. [music] [pop captions down] [commercial break] [music]

**leo:** you probably heard about myspace and facebook and all of the other social networking pages. these are, these are pages where people gather. they collect friends. they talk to their friends. they have fun and they've really become very popular with the kids. well ah there's one that's hot right now, its called facebook. in fact you know what the number one city for face, you know this.

**kate:** i know this one.

**leo:** for facebook is in the entire world is toronto of all places?

**kate:** i know.

**leo:** yeah. facebook is really fun. i, i have to say of all of the ones i've tried i've, i've kind of fallen in love with facebook. and i know we've hooked you on it. kate abraham is here. [pop captions up]

**kate:** i am addicted to this site and it's unfortunate cause it kills so much time.

**leo:** it is.

**kate:** i was like who's that? i know that person. can i find them? but yes. [pop captions down]

**leo:** so what is the appeal of it? why do you like facebook?

**kate:** i like it because it's simple and easy to use.

**leo:** okay.

**kate:** like it's so simple and you can basically get from it what you want.

**leo:** yeah but what do you get out of it? i mean what is it that, what is it that --

**kate:** um for me it's a, it's like a geography issue. i can contact people in england i haven't spoken to in years.

**leo:** okay great.

**kate:** and as i was saying to you before actually the weird thing with england is it's taken a little bit of time

to catch on.

**leo:** right.

**kate:** so suddenly now i'm getting an influx of people saying hey kate how are you?

**leo:** you're on facebook.

**kate:** i'm like --

**leo:** oh neat, i see.

**kate:** i've got like 5,000 contacts from toronto, from toronto right?

**leo:** right.

**kate:** so it's yeah for me purely for the english point of view it's great.

**leo:** staying in touch with friends.

**kate:** yeah.

**leo:** old friends.

**kate:** yeah.

**leo:** distributed friends across the world. also even just your, your circle of friends, people that you don't necessarily talk to all the time.

**kate:** yeah.

**leo:** or, or want to email it's a way of kind of the lightweight way of kind of seeing what they're up to.

**kate:** exactly, exactly. i even chose you on facebook now.

**leo:** yeah i, i actually i fell in love with facebook. i'm totally hooked on it. i think it was amber macarthur that got me hooked and now you.

**kate:** yeah.

**leo:** but that's one thing i should say, that it none of these make sense until a lot of your friends are on there right?

**kate:** yeah if you don't know anybody on the site it's kind of like redundant, it's pointless.

**leo:** it's pointless.

**kate:** yeah.

**leo:** yeah.

**kate:** you know and it's, it's kind of weird cause a lot of people use it as like a meet and greet kind of format as well. which i tend to use my computer for people i know.

**leo:** me too.

**kate:** and you do the same.

**leo:** yeah me too.

**kate:** whereas amber takes people obviously who --

**leo:** she's got thousands of friends.

**kate:** exactly and i'm, i'm more kind of i've got a work account. but i've got my personal one, which is for people i actually know.

**leo:** right. [pop captions up]

**kate:** just because you know otherwise the information on there, cause you can put like a lot of information on there, which is relatively personal.

**leo:** right.

**kate:** like you know email addresses.

**leo:** right.

**kate:** your, your cell phone numbers.

**leo:** right.

**kate:** that kind of thing so.

**leo:** one of the things that changed my outlook on facebook was when they added about three months ago, they added applications. [pop captions down] [both laughing]

**leo:** and that's how you can really customize it.

**kate:** it -- it.

**leo:** so kate's gonna start showing us new facebook applications. there are hundreds and hundreds now, more all the time.

**kate:** yeah.

**leo:** and, and it's hard to know which ones are good. and there's some silly ones and there's some very useful ones.

**kate:** yeah, yeah, some of them don't even work right.

**leo:** so here's kate's top five.

**kate:** top five.

**leo:** the most important facebook apps.

**kate:** there might be, there might be a top six. but that's if we --

**leo:** okay if we have time we'll get to a sixth.

**kate:** so the top five, my first is my video. this is obviously my, my actual homepage here.

**leo:** and this comes from facebook.

**kate:** yes it's actually made by facebook and what it is basically allows you to upload videos into facebook. you can record it with your isight camera.

**leo:** neat.

**kate:** you can upload via, via your cell phone or you can actually upload files as you would do with like a you tube that kind of thing.

**leo:** okay.

**kate:** so what i'll do is just give you a little demo of us. this is us --

**leo:** so it's kind of like you tube on facebook. [talking background]

**kate:** exactly. and the only, the only sort of negative with this once you've actually uploaded into facebook, so for instance if you actually uploaded via a recording the problem is you can't actually take that anywhere else. you can't encode them into different sites. so you have --

**leo:** unlike you tube there's no embed.

**kate:** exactly.

**leo:** okay.

**kate:** yes you have to use it purely on facebook.

**leo:** okay.

**kate:** so that's, that's a great, i mean it's a great facility. the idea is now you can actually use this for your profile as well. [pop captions up]

**kate:** so you can use your, rather than a photograph you can actually have a facebook video for your profile.

**leo:** i see the fun of this. i mean your friends record something --

**kate:** yeah.

**leo:** and then you want to see what they're doing and what they're up to.

**kate:** well it's the epitome of laziness right. you haven't got to type anything, just record it and send it.

**leo:** well that's kind of what facebook's all about.

**kate:** yeah. [pop captions down]

**leo:** instead of staying in touch you just do stuff like this.

**kate:** exactly so that's --

**leo:** all right so number one is video my video.

**kate:** that's number one. yeah number two is actually via the, the zuport flickr because obviously we have a flickr account.

**leo:** there are about 20 different flickr applications on facebook.

**kate:** yeah.

**leo:** that are designed to import your flickr photos into facebook.

**kate:** yes.

**leo:** you've looked at em all and you think this one is the best.

**kate:** personally i prefer this one because --

**leo:** zuport's flickr.

**kate:** zuport flickr.

**leo:** okay.

**kate:** and what happens is you can literally it, it just imports your photos as it automatically imports from flickr.

**leo:** so it puts a little photo album on your facebook page.

**kate:** yeah. [pop captions up]

**kate:** so as i update it updates here which is fantastic and then basically - -

**leo:** by the way you see how these applications work. they, they embed themselves onto your facebook page.

**kate:** and you can drag and drop them wherever you want them as well which is great.

**leo:** okay.

**kate:** and then basically you have various options with the flickr so for instance you can have a certain number of photographs. [pop captions down]

**kate:** and it pulls all your tags through and all obviously your, your titles and your comments as well. and then what we do is if you literally just click through it takes you straight through to the actual flickr site.

**leo:** it actually opens up flickr and brings up flickr.

**kate:** yes and that's gonna take forever.

**leo:** so let's not do that. but i get the idea.

**kate:** so you see what i mean so --

**leo:** so and these will automatically update the pictures on there?

**kate:** yes.

**leo:** so as when i upload a new picture to flickr --

**kate:** yes.

**leo:** which is a photo sharing account.

**kate:** yes.

**leo:** that's what kind of key on these social networks is they need to interoperate.

**kate:** exactly.

**leo:** so i don't have to upload a you tube and facebook.

**kate:** that's the thing.

**leo:** i don't have to upload to flickr and facebook.

**kate:** yeah.

**leo:** i can do the one and then it picks up the others.

**kate:** that's the thing. so obviously you want to have everything consolidated in one place.

**leo:** right.

**kate:** so that's um yes that's my number two.

**leo:** okay number three.

**kate:** okay number three is web presence and i know you're a big fan of this.

**leo:** web presence yeah.

**kate:** yes.

**leo:** yeah.

**kate:** web presence is this little box here and --

**leo:** i used this before.

**kate:** what you can do is you consolidate your online identity with the web presence. so for instance --

**leo:** link to your other pages basically.

**kate:** yeah like for instance jaiku. [pop captions up]

**leo:** right.

**kate:** like obviously the g4 tech tv canada site we have.

**leo:** you've got your blog.

**kate:** yeah we've got the lighter camera feed to stick them on there.

**leo:** uh-huh.

**kate:** so basically what you can do is you can navigate where i am online --

**leo:** right. [pop captions down]

**kate:** just basically through here.

**leo:** very cool.

**kate:** very easy and obviously it basically then having to list everything down on your profile it's just there.  
[pop captions down]

**kate:** it's got the icons. it's --

**leo:** this is the kind of thing you'd do on any normal webpage.

**kate:** yeah.

**leo:** you'd have links to your other pages.

**kate:** absolutely.

**leo:** and so this just, just allows that. that's called web presence.

**kate:** yeah um --

**leo:** number four.

**kate:** number four this is for me. i'm a huge travelhead.

**leo:** yeah me too.

**kate:** so i went to the, this is by --

**leo:** holy cow you haven't been to all those cities.

**kate:** okay actually see the thing is this is by trip advisor. this is cities i've visited.

**leo:** you're kidding. [pop captions up]

**kate:** i got up to 144 and - -

**leo:** you've been to that many cities?

**kate:** and i got bored, so i've actually been to more.

**leo:** holy cow.

**kate:** but the problem was is that the, that the list is huge.

**leo:** so this is a map a google map of everywhere you have visited.

**kate:** exactly. yes it's, it's powered by google maps and so it's very interactive. and obviously trip advisor is the biggest travel community online.

**leo:** i like trip advisor. i use them a lot.

**kate:** yeah so it can help you plan various trips and it's yeah its, its super easy. but as i say it takes such a long time to fill in where you've been cause --

**leo:** you've been that, how, how is it you've travelled so much?

**kate:** cause europe's this big and the flights are cheap.

**leo:** yeah but i mean look you've been to egypt, jamaica. [pop captions down]

**kate:** yeah.

**leo:** mexico.

**kate:** yeah.

**leo:** you've even been to italy and the czech republic.

**kate:** yeah.

**leo:** wow that's cool.

**kate:** ryanadelcom but that's a different segment.

**leo:** that's another segment.

**kate:** yeah that's a whole different thing.

**leo:** so that's, that's the cities i visited, all right.

**kate:** yeah on trip advisor.

**leo:** okay that's number four.

**kate:** and these other ones are like a similar idea to that like countries as well.

**leo:** number five.

**kate:** number five keep me in touch with home the bbc world service.

**leo:** the b. [laughs] [pop captions up]

**kate:** so what this is basically is you can literally allocate the feed and netforks do the same thing as well. but you -- [both talking at once]

**leo:** so this is rss feed.

**kate:** yeah and basically i've chosen the uk edition so i can keep up to date for everything that's going on at home. so for instance the new "simpsons" movie that's coming up. [pop captions down]

**kate:** so basically it just gives me an updated feed within my facebook profile page so i can see what's going on at a glance.

**leo:** very cool.

**kate:** and my last now this is number six, this is just for you cause once i'd actually selected my top five --

**leo:** you had five.

**kate:** this number, number six came out.

**leo:** this is number six. oh yeah and i have to thank chris jones for doing this.

**kate:** and you, you know exactly what this is.

**leo:** and sasha did this. this they really did a nice job.

**kate:** yes and it's the twit -- [pop captions up]

**leo:** sasha lopez and chris johnson.

**kate:** and it's great.

**leo:** this is every twit podcast that i do.

**kate:** yeah absolutely you just basically you can literally listen from within - -

**leo:** you click the album cover --

**kate:** that's right.

**leo:** and you play the most recent i see. [both talking at once]

**kate:** so literally here's amber's net at night.

**leo:** her web is down, i mean that's down right now. i see somebody's giving you a gun.

**kate:** that's a joke. this is -- [both talking at once] [pop captions down]

**leo:** that's another app we'll play that another day. [both laughing]

**kate:** that's a friday afternoon laugh.

**leo:** we're gonna do more apps every, every show.

**kate:** yeah.

**leo:** i hope you'll come up with a fun application. it's there's an endless supply of these. sometimes the temptation is to put everything on your page but really you want to pick just --

**kate:** like i have here? [laughs]

**leo:** just the best stuff. but it is it's fun. it makes, it makes facebook more personal.

**kate:** yes absolutely.

**leo:** it makes it more fun and a lot of these have some real utility like places you visited.

**kate:** yeah.

**leo:** so we'll continue to do that with kate abraham and you'll have links to all of these facebook apps and to facebook itself and more about facebook on our website. [pop captions up] [blank for boards]

**leo:** thank you kate. that's really cool.

**kate:** thank you.

**leo:** now go get us another call.

**kate:** okay.

**leo:** go get another call. we'll be right back right after this. [music] [pop captions down] [commercial break] [music]

**leo:** welcome back to "the lab with leo". time for another call and then we'll get to one of yewell's jewels our free file of the day. but kate first what do you --

**kate:** we --

**leo:** get off facebook and give us a -- [laughs]

**kate:** i'm working too hard. i have carolyn from winnipeg in manitoba on the line.

**leo:** i have to confess i immediately went to my facebook and added a few of those apps. hey carolyn how are you?

**carolyn:** hi good how are you?

**leo:** i'm great. welcome to the show.

**carolyn:** thank you.

**leo:** what can we do for you today? [pop captions up]

**carolyn:** i'm wondering is there any advantage to running more than one anti-virus program on your computer?

**leo:** well --

**carolyn:** like my own pc.

**leo:** hmm, okay. what, what, what programs are you thinking of? [pop captions down]

**carolyn:** ah the free ones.

**leo:** the free ones, i don't blame you yeah. you should not run more than one anti-virus.

**carolyn:** oh.

**leo:** in fact all the anti- viruses will say this and it's for a very simple reason they'll conflict with each other. very often one anti-virus will see another anti-virus and say it's a virus.

**carolyn:** that's what i thought.

**leo:** and the reason is those signature files that, that the anti-virus uses to detect viruses often look like viruses to other anti-viruses.

**carolyn:** mmm-hmm. [laughs]

**leo:** now that means you shouldn't run multiple different ah security programs. it just means that you should only run one in the anti-virus category.

**carolyn:** okay.

**leo:** anti-spyware is a separate category so you can have in fact oddly enough you can have multiple anti-spyware programs and i actually recommend that.

**carolyn:** hmm okay.

**leo:** ah, ah firewall different kind of security program generally will not conflict with an anti-virus so you could run those. here's what my suggest is.

**carolyn:** okay. [pop captions up]

**leo:** first of all carolyn i want to underscore that's really, really important. something has changed significantly in computing in the last few years.

**carolyn:** okay.

**leo:** it used to be you could put an anti-virus on your system sit back and relax and not worry.

**carolyn:** right.

**leo:** not so anymore. [pop captions down]

**leo:** for several reasons. but the biggest one is that the, the reason people put viruses on your system has changed.

**carolyn:** okay.

**leo:** in the past virus authors did it for the glory. it was a form of vandalism.

**carolyn:** yes.

**leo:** and a form of bragging. they said look what i can do, what a clever hack i am. and so they would announce it. they wanted the world to know. melissa and these other email viruses they announced it. they broke your machine. they did something that you would notice. nowadays the, the reason people want to put malicious software on your computer is not vandalism, is not for the glory. it's because they make money on it by taking over your system and selling it to the highest bidder for things like referring spam on or hacking other machines or attacking other machines or getting credit card numbers that kind of thing.

when you do that kind of thing you don't want the person who's infected to know. you want to be very sneaky. you want to go under the radar. so there's no announcement. you spread very quickly often through webpages or email. sometimes so quickly that the anti-virus companies can't keep up. it usually takes them a day or two to keep even if you update regularly. ah they you also and this is even more important when you attach yourself to a system you do so in a way that makes it very hard remove you. you either hide yourself so the anti-virus can't see you. many what if a, a virus gets on your system if you get any virus didn't catch it sometimes they'll disable the anti-virus. they'll break the anti-virus.

**carolyn:** oh.

**leo:** or they'll hide themselves in such a way that the anti-virus can't even see them using something called a root kit. sometimes what they'll do is they won't try to hide but they'll attach themselves to a system file. and you've probably seen this. an anti-virus will say well i see you have a virus but i can't get rid of it because if i do so your system will never boot again or you'll never get online again. so the real problem is that these viruses have gotten so insidious that anti-virus software and anti-spyware software is no longer effective. the first line of defense, the most important line of defense is you. your behaviour, you've got to change your behaviour. you've got to be very careful about what you do so you don't get one in the first place. it's okay to have an anti- virus carolyn. you should, anti-spyware you should but don't rely on it. it's the second line of defense. you've got to make sure you don't open email attachments. you don't download software from strange sites. you're careful about the sites you visit. you update your operating, operating system as soon as the updates are available. you make sure you apply all those security patches. you know these basics are fundamental. use firefox or internet explorer 7, not ie6 cause that's a really dangerous browser. all of these things will make you less vulnerable to spyware. um but you can which, which free anti-virus are you using? are you using avg or evac -- [pop captions up]

**carolyn:** right now i just got actually a brand new laptop.

**leo:** oh good.

**carolyn:** and --

**leo:** so you have it already has something built in probably.

**carolyn:** yeah but it's running out soon.

**leo:** yeah it'll expire and i don't usually they come with mcafee or symantec norton anti-virus.

**carolyn:** mmm-hmm. [pop captions down]

**leo:** neither of which are my favourites because they really bog your system down.

**carolyn:** yeah, i'm not real impressed with norton.

**leo:** yeah norton is not great. i mean it's not that it's not effective it just really slows you down.

**carolyn:** yeah.

**leo:** but again nothing is perfectly effective. if you go to the best my you know if you really want to get the best anti-virus go to a place called av- comparatives.com.

**carolyn:** hmm okay.

**leo:** they do regular ratings every let's see every, every few months.

**carolyn:** yeah.

**leo:** its av- comparatives.org i believe actually not .com. av-comparatives.org and read the ratings. um my personal favourite cause it's very ah lightweight and easy on the, on the resources is eset's nod32.

**carolyn:** hmm.

**leo:** it's very fast. all of them are about the same price. [pop captions up]

**leo:** avg is free but not 100% effective. avast is free but not 100% effective. if you look at the most recent ratings i think the winning combination anti-virus is a combination of kaspersky and i think avg. [pop captions down]

**carolyn:** okay.

**leo:** it's a dual virus engine. but that's not necessarily the best because they're you know they may not be fastest. they might you know so the truth is no anti-virus is perfect. even the, even the best on these tests don't get every virus. and that's particularly true of brand new viruses. the ones you're most likely to get. so

get a, get, get one anti- virus. i don't it doesn't really matter. avg is free it's fine. antivira is free it's fine. um get as many anti-spyware programs. i'd start with microsoft defender. you probably want spybot and ataware. um don't rely on em. i don't recommend a firewall software cause they tend to slow your machine down. if you have a router, if you've already got a router sharing your internet that's fine. if not turn on the windows firewall it won't slow down your machine. and then mainly do what i said about changing your behaviour because that's the most important thing you can do.

**carolyn:** yes.

**leo:** but don't, don't run two anti-viruses carolyn.

**carolyn:** okay.

**leo:** okay?

**carolyn:** all right thank you leo.

**leo:** thanks for it's such an important subject. i'm glad you called cause i you know people just really have to continually pay attention to this on windows especially. although mac folks don't feel too smug cause i think the time will come sooner then later that you'll have to worry about this stuff too, maybe not to the same degree. but right now you don't. i admit it you don't. hey let's wander over here to mr. ryan yewell. he is yewell's jewels.

**ryan yewell:** yes.

**leo:** our free file fellow. what have you got?

**ryan yewell:** today's mac.

**leo:** today's mac.

**ryan yewell:** it's virtue.

**leo:** virtue.

**ryan yewell:** or virtue desktop as some people like to call it.

**leo:** i use it. [pop captions up]

**ryan yewell:** yes.

**leo:** i love it.

**ryan yewell:** so i'm talking to it's probably the master here. so i'll do my best to demonstrate. you can trigger basically away to have different desktops. [pop captions down]

**ryan yewell:** so right now - -

**leo:** this is something that's going to be built into leopard but that won't be out till october.

**ryan yewell:** okay.

**leo:** so you can do it now.

**ryan yewell:** you can do it now.

**leo:** for free.

**ryan yewell:** for free. [pop captions up]

**ryan yewell:** so what you do is you can trigger it with a, with a command so i just have it triggered right now. and i can choose my main setup, my calendar, lab with leo website.

**leo:** so what happens if you go to these? i mean these -- [pop captions down]

**ryan yewell:** so what i'll do is i'll choose calendar- ific and all of a sudden --

**leo:** ooh.

**ryan yewell:** here comes a desktop and calendar is up.

**leo:** so you'll have a, you can have different applications opened in each desktop.

**ryan yewell:** exactly.

**leo:** so it kind of organizes.

**ryan yewell:** yeah so you don't have to like minimize stuff.

**leo:** right.

**ryan yewell:** and if you have something set up the way you like it and you bring up another program and it comes overtop it's just, this way it keeps everything organized. you can switch between them. you can add as many as you want. it's, it's great. i love it.

**leo:** linux users started doing this and now everybody wants to do it and i think this is a great free way to do it, virtue desktop.

**ryan yewell:** virtue desktop for the mac. big thumbs up yewell's jewels.

**leo:** absolutely free.

**ryan yewell:** this one is free.

**leo:** find all of yewell's jewels at --

**ryan yewell:** labwithleo.com. [pop captions up]

**leo:** that's the website, lots of good stuff there too. coming up how would you like to make a little money with and help, help your users too find stuff on your website? raj brar our webmaster is gonna show us a google search designed just for your webpage when "the lab with leo" continues. but first a chance for you to take or quiz, quiz question our -- [speaking gibberish]

**leo:** right?

**ryan yewell:** yeah.

**leo:** our quiz quest question of the day. [blank for boards]

**leo:** i'll give you a hint. he was a sophomore in college when he did it. boy that's a big hint. [blank for boards]

**leo:** i did say he, so i guess we can remove, remove amber from the list. [laughs]

**sean carruthers:** we don't know.

**leo:** get to the website. give us your answer. we'll tell you when "the lab with leo" continues right after this. [music] [pop captions down] [commercial break] [music] [pop captions up]

**leo:** before the break we asked you who created facebook. the guy was a sophomore in college, mark zuckerberg. he wanted to make a website that was kind of like the facebook that they hand out when you go to college. ah all the students at harvard, it's a university signed up. [pop captions down]

**leo:** he said hmm this could be a business. he sent it soon to other schools and pretty soon he had a company that was worth so much money that when yahoo came along and offered him one billion dollars for it he said no it's worth more, it's worth more. and he might be right. that's what's amazing. i hope you got that right. raj brar is here. he is our webmaster and runs "the lab with leo" site.

**raj brar:** i do.

**leo:** it's good to see you raj.

**raj brar:** good to see you.

**leo:** does it, does it bug you when you see people like mark zuckerberg you know an 18-year old turning down a billion dollars.

**raj brar:** it does, it does bug me.

**leo:** like what did we do wrong? [laughs]

**leo:** well some day someone's gonna offer you a billion dollars for this great "the lab with leo" site.

**raj brar:** i hope so.

**leo:** yeah, yeah. and you'll have to say well go ask victor cause it's his. so i use on my website i use google search on my website.

**raj brar:** mmm-hmm.

**leo:** and it's a really nice way to add search to a website.

**raj brar:** yeah.

**leo:** they've, they've updated a little bit though haven't they?

**raj brar:** they have. [pop captions up]

**raj brar:** they've certainly incorporated java um ajax now.

**leo:** what is ajax?

**raj brar:** ajax is um it's basically a bunch of web tools which allow you to update certain parts of web, of a, of a webpage without actually sending it back to the server. [pop captions down]

**leo:** it's hard to describe. but people who undoubtedly see it they, they -- [both talking at once]

**raj brar:** they use it every day.

**leo:** it's on a lot of websites.

**raj brar:** yeah.

**leo:** and it's really cool because you can enter a field or something instead of the whole page redrawing just that part.

**raj brar:** just a certain part, exactly.

**leo:** and, and that really makes it much easier. so this would be a good way to add google search.

**raj brar:** exactly.

**leo:** is this for people to put on their webpage?

**raj brar:** yes they can do it. it's free. it's open source.

**leo:** oh i have to look at this.

**raj brar:** yeah.

**leo:** cause i'm already using it. i make a lot of money on that by the way because if you have a google adsense account --

**raj brar:** yeah. [pop captions up]

**leo:** they'll pay you for clicks as clicks in there. [both talking at once]

**raj brar:** exactly yeah.

**leo:** yeah.

**raj brar:** yeah so what they've done now is they've added some really cool features to it. [pop captions down]

**leo:** how hard is this for us to implement?

**raj brar:** it's very easy.

**leo:** okay. [pop captions up]

**raj brar:** you can just basically go and get the download the or sorry copy the javascript into your own page. and this is just a simple example of it here. um it comes with a basic search for --

**leo:** so you're gonna search for a ferrari enzo.

**raj brar:** a ferrari enzo.

**leo:** because you made so much money on this site.

**raj brar:** exactly. [pop captions down]

**raj brar:** what this allows you to do actually is when you do, do the search you can actually search across google's um --

**leo:** that's nice.

**raj brar:** other components as well. you can search the web and so forth. so if i do that one search i have now tab searched for the web.

**leo:** and notice it's ajax cause the whole page is not reloading.

**raj brar:** exactly.

**leo:** it's just that bottom part where the results are.

**raj brar:** so these are all different search um just through that one search.

**leo:** wow.

**raj brar:** we could do "the lab with leo" or just "the lab" and hopefully something will come up. um you'll see the page of course isn't refreshed. but um the whole page doesn't have to be refreshed just cause it searches. i think our internet is slow today --

**leo:** our internet is down.

**raj brar:** so we're probably a little --

**leo:** so it just bogged it down.

**raj brar:** exactly. but --

**leo:** that's okay. but whenever i search for my name i find enzo ferrari as well. i don't know why that is.

**raj brar:** well um now there's --

**leo:** so this is the page that you would go to. if you've already used, if you're already a google adsense user

--

**raj brar:** mmm-hmm.

**leo:** this should be just something you can, you can add.

**raj brar:** yeah it's really easy to add. it's just a bunch of javascript and they'll -- [both talking at once]

**leo:** okay there'll be a tab in your adsense where it just says google search.

**raj brar:** yeah. and now, now the cool thing about it also is you can totally um css um --

**leo:** to customize.

**raj brar:** to customize it. to make it look exactly the way you want it to, to your page.

**leo:** oh that's nice.

**raj brar:** incorporate it into your page.

**leo:** in the past all you could do is to give them an image and they'd put, plunk the image on there.

**raj brar:** exactly.

**leo:** and maybe change some colours.

**raj brar:** now we do use it on the web our website as well for google search so you'll be able to see that --

**leo:** how do you find that google search? is it pretty up to date? does it do pretty well? is it as good as say using a search engine on your own site?

**raj brar:** well i was going to use the drupal's built in.

**leo:** right.

**raj brar:** cause i wanted to really kind of test out cause i'm sort of interested in the features that google is now sort of providing and i find it great. i find --

**leo:** they index the site regularly and --

**raj brar:** because it's really indexed really well and i think that um yeah it does a, it even does a better job then i think the dru, the drupal.

**leo:** the drupal cause the drupal search is pretty good.

**raj brar:** it is, it is yeah.

**leo:** so that's good. that's, that's saying a lot.

**raj brar:** great.

**leo:** wow.

**raj brar:** and now also --

**leo:** it also uses less of your system resources cause you don't have to build a search engine.

**raj brar:** exactly.

**leo:** you let google do the work.

**raj brar:** let, let them do the work and even incorporating video and so forth.

**leo:** wow that's great.

**raj brar:** now another thing you can do you can search video as well. so when you're searching for a specific um --

**leo:** if you click on our site you could just find it there.

**raj brar:** exactly. [both talking at once]

**leo:** why not? that's really cool.

**raj brar:** so here for enzo ferrari again you can see there's web blogs. blogs that have been searched, there's web and then video as well. um a really cool application of this is this again two minute world which basically it just built a globe with cities listed and if you click on a specific city you'll see on the right hand side that it will update --

**leo:** eventually -- [both talking at once]

**raj brar:** eventually it will update.

**leo:** when our connection improves.

**raj brar:** exactly. it will update with information.

**leo:** we killed that connection. i'm sorry to say.

**raj brar:** um and, and it, it will update web video and so forth.

**leo:** so he's and that's using the google search.

**raj brar:** it's using the google search.

**leo:** so he's embedded it on the site.

**raj brar:** yeah.

**leo:** that's, that's really nice.

**raj brar:** yeah.

**leo:** you can do really much more custom searching.

**raj brar:** you can actually hook it up with google maps as well. so if you do a and have them on both displayed on the same page. so you can search across everything that google allows to search across.

**leo:** neat.

**raj brar:** maps, videos and so forth.

**leo:** where should you go to, to find out about this?

**raj brar:** you can just go to the google website and do a search for google ajax or again google search api. but it's our we'll have a link on the website.

**leo:** okay.

**raj brar:** it's code.google.com.

**leo:** once again some of this neat stuff coming out of the google lab.

**raj brar:** and it's yeah.

**leo:** it's very cool. [pop captions up]

**raj brar:** and there's a lot of, a lot of examples on there so it's easy to get into.

**leo:** for more information there's the long url. i'm not gonna make you memorize that. just go to labwithleo.com and you'll find everything you need to know including raj's explanation of what it can do. and a link to two minute world so you can see it in action.

**raj brar:** yeah.

**leo:** that's really neat. [pop captions down]

**raj brar:** yeah.

**leo:** that's really neat. all right a final word with "the lab with leo" as we continue right after this. stay right here. [pop captions down] [music] [commercial break] [music]

**leo:** you know what i like about this show is we have such a broad range of information. everything from if you're a web designer how to update your page.

**kate:** mmm-hmm.

**leo:** if you want to do facebook. you've got to get fancy how to hack an alarm clock with a usb port or how just to reinstall windows and protect yourself on the internet.

**kate:** yeah.

**leo:** it's all on one show.

**kate:** exactly.

**leo:** and i think that's kind of fun. i hope it's not overwhelming. you know sometimes i get emails from people who say you know i watch the show. i don't understand a word you're saying but i watch the show. and i guess what i would say to you is don't worry you will eventually. it just kind of soaks in.

**kate:** absolutely.

**leo:** when, when you came here you weren't a particularly geeky person.

**kate:** no.

**leo:** but you're turning into one aren't you?

**kate:** you guys are slowly twisting me around.

**leo:** yeah you understand what we're talking about.

**kate:** exactly. the thing is though we've got the shownotes on our website as well. so people can go there to refer to the videos and shownotes.

**leo:** yeah.

**kate:** and there's more kind of background there.

**leo:** if you feel like doing homework.

**kate:** yeah exactly. [laughs]

**leo:** like studying up then you can do --

**kate:** we will test you.

**leo:** but i think if you just watch the show you know give it a few episodes maybe six weeks. that's all i ask. six weeks watch this show for six weeks, let it wash over you even if you don't understand some stuff. and i think by the, by the after a, after a while it's just a culture that you kind of start to understand.

**kate:** yeah.

**leo:** and frankly there's a real value of doing that because this is really an exciting part of the world. it's really where it's changing most rapidly and, and it's not just toys. it's not just fun and games. i mean it really is stuff that's changing everything.

**kate:** yeah.

**leo:** how we work. however we vote.

**kate:** yeah. [pop captions up]

**leo:** how we participate in our governments. how we, how we go to church. how we, how we go to school. i mean everything so that's why i think it's important that, that you, that you learn it. and that's why i think that's why we spend so much time trying to communicate it to you. if you've got some suggestions or thoughts or some input you'd like to make you can always go to our website. [pop captions down]

**kate:** indeed.

**leo:** kate has a blog there, which is a fun read if you want to see what's going on behind the scenes.

**kate:** it's actually video now.

**leo:** you do it in video now?

**kate:** i do it in video now.

**leo:** isn't that fun? [pop captions up]

**kate:** it's so much fun.

**leo:** do you record it on here?

**kate:** yes we do.

**leo:** yeah.

**kate:** it records is fantastic.

**leo:** i am afraid i'm -- you should do that some time with a flashlight.

**kate:** i did that yesterday.

**leo:** you did? i am so scared anyway also if you to the website that's where you can ask a question and get on the show cause that's a really important part of the show. just go to [labwithleo.com](http://labwithleo.com) there's a form right on the front you can fill out.

**kate:** indeed.

**leo:** and kate will call you and get you on the show. thanks for joining us. we'll see you next time on "the lab", bye-bye. [pop captions down] [music] [coins bouncing] [music] [pop captions up quickly] closed captioning performed by: broadcast captioning & consulting services inc. [www.closedcaptioning.com](http://www.closedcaptioning.com) [pop captions down]