BROWSER EXTENSION SECURITY

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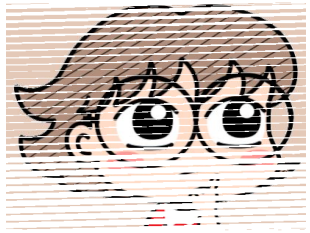
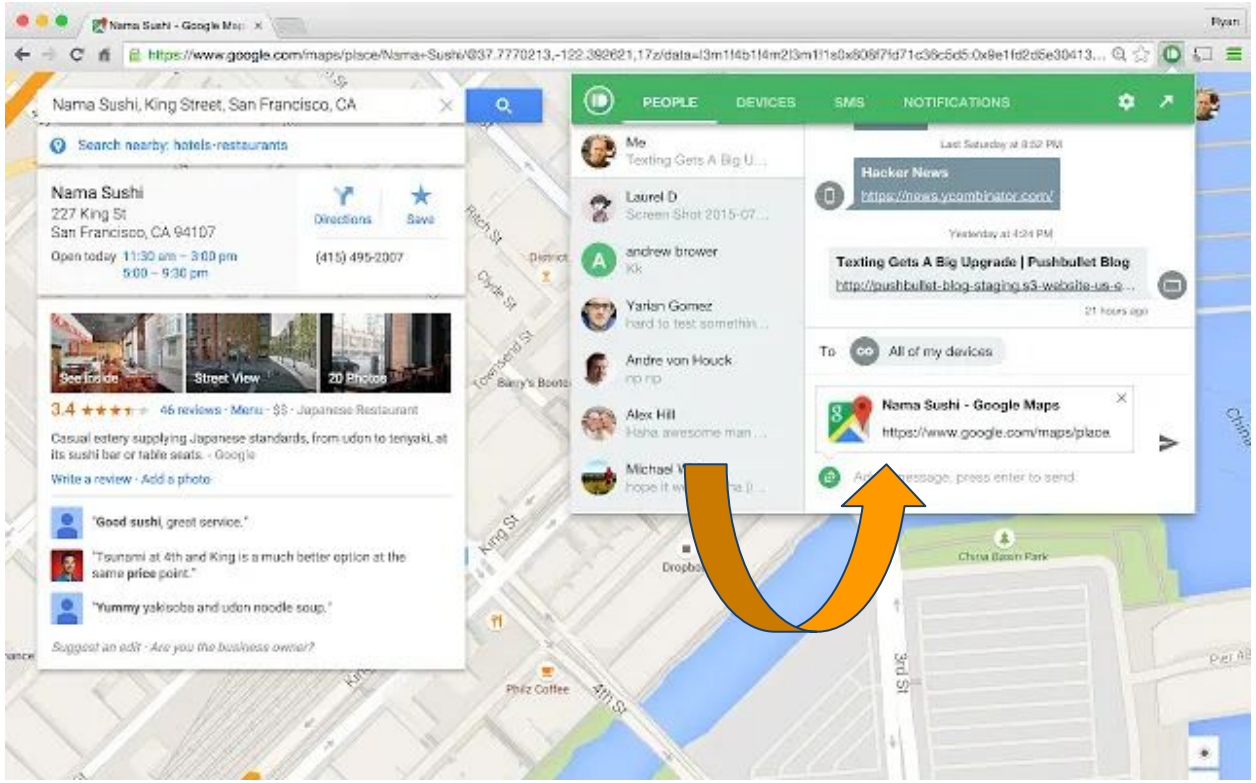
What is Browser Extension?



- It is a small software application program.
- It adds a capacity or functionality to web browser.
- The terminology,however maybe different for different browsers;we have Chrome Extensions and Firefox Add-ons and others…

EXAMPLE



Pushbullet is one of the most valuable Chrome extensions around. It pushes your important notifications to Chrome and allows you to respond without leaving the browser

HOW DO THEY WORK?

When your extension (javascript code) runs inside the browser,it can access various informations, like :

1. Page Url
2. Html of the entire page
3. If user has selected something, and what has he selected
4. If the user clicked

etc etc etc …

Using these information, they can do a lot of cool stuffs like

1. Remove ads on the pages
2. suggest similar pages on the internet

etc etc …

HOW TO DEVELOP?

HOW TO DO IT?

(At broader level) , you just need to keep writing that JavaScript and give it to the browser and the browser will run it on the webpage for you !

Well, that is , if the user has installed your Extension

WHY HAVE EXTENSIONS?

- A Browser in its base form provides only the absolutely necessary features/functionality.
- Extensions can provide more features on the top of the basic browser functionality.These features can make a user's life easier,enable him to do more stuff etc.
- This enables users to install only features they use, and not unnecessarily load the browser with useless features.

BROWSER EXTENSION SECURITY

Browser Extension security refers to the measures and practices implemented to protect users from potential risks and threats posed by malicious or vulnerable browser extension.

IF BROWSER EXTENSION IS SAFE OR NOT?

HOW TO KNOW IF BROWSER EXTENSION IS SAFE OR NOT?

- Check reviews and ratings
- Research the developer
- Number of installations
- Permissions
- Security features
- Use trusted sources
- Antivirus software

BROWSER EXTENSION ATTACKS
1.Cross-site scripting(XSS)
2.Malicious extensions
3.Session hijacking
4.DNS poisoning
5.Man-in–the-middle(MitM)

TOP 10 BROWSER EXTENSIONS

- Grammerly
- LastPass
- Adblock plus or Ublock origin
- Honey
- Pocket
- Evernote web Clipper
- HTTPS Everywhere
- Pushbullet
- OneTab
- Momentum

?
PROS
CONS

PROS OF BROWSER EXTENSION

- Enhanced functionality
- Customization
- Productivity Boost
- Security and privacy
- Integration with other services

CONS OF BROWSER EXTENSION

- Performance impact
- Security risks
- Compatibility issue
- Intrusive ads or tracking
- Over-reliance and clutter

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