# Build Your Own Extension for Firefox... and Beyond!



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#### Agenda

- Introduction
- Build your first extension
- Create an original add-on and share it on addons.mozilla.org
- Continue the conversation

Please tweet your attendance! Example:

I'm customizing @Firefox by building my own @MozWebExt! #MozActivate #MozAMU @ErSanyamKhurana



#### **About Add-ons**

- Use add-ons to personalize your browsing experience
- Variety of uses:
  - Organizing tabs
  - Language support
  - Blocking ads
  - o ... and so much more!
- With WebExtensions APIs, add-ons are easier than ever to create
- Compatible with Firefox, Chrome, and Opera



#### Build Your First WebExtension Add-on

#### **Mozilla Developer Network Tutorial:**

https://developer.mozilla.org/en-US/Add-ons/WebExtensions/Your first WebExtension

#### **Other Tutorials:**

- Let's Write a WebExtension by Blake Winton
- WebExtensions: An Example Add-on Repository with Test Harnesses by standard8
- Create a Simple WebExtension by David Walsh

#### **WebExtension Examples:**

https://developer.mozilla.org/en-US/Add-ons/WebExtensions/Examples

Need help? Join IRC channels #extdev and #webextensions.



#### A word about your co-instructor

Shashank Kumar

CSE Undergraduate Student

Open Source Contributor - github.com/realslimshanky

Trying to be a active blogger - blog.shanky.xyz

Active volunteer in community - reason being present here!



#### **Prerequisites**

- HTML
- CSS
- JS
- Web Browser
- Internet (optional)



## Why Browser Extension?

- Simplify development
- Increasing cross-browser compatibility
- Reducing development cost
- Abstracting functionalities



## Setting up extension folder

- Create a new folder named borderify
- Switch to Borderify directory
- Create a new file manifest.json



#### manifest.json

- Most important file of your extension
- Must contain atleast 3 keys: manifest\_version, name, version
- Everything else is optional, but it'll not look cool at all with just 3 keys



## More power to manifest.json

- Descriptions
- Icons
- Content Scripts



#### **Content Scripts**

- Must have a array as property
- Must have atleast 1 item in array
- Each item must have 2 keys, matches and js



#### Match Pattern - matches to Content Scripts

- An array of patterns
- Should be in form<scheme>://<host><path>
- Can use wildcards
- Special wildcard include <all\_urls>



### JS to Content Scripts

- An array of js scripts
- That's it!
- Really!
- No kidding!



## Adding content to you js

- Create browserify.js
- Write and save below statement inside it document.body.style.border = "5px solid red";
- Add browserify.js to manifest.json



## Understanding what went down

- Browser loads manifest.json
- With it the information about the extension is processed
- Extension loads resources accordingly



#### **Great Work!**



#### Create an Original WebExtension (Bonus!)

#### When You Are Done:

- Publish link to addons.mozilla.org
- Once your add-on has been approved, tweet a link to your add-on!

#### **Example:**

I made an add-on using @MozWebExt for @mozamo! Check it out here: <link to add-on> #MozActivate



#### Continue the Conversation!

- Tweet to @MozWebExt
- Join IRC channels #addons, #webextensions and #extdev
- Join the Telegram groups @addonschat and @addons
- Follow and post to the Add-ons Discourse forum at https://discourse.mozilla-community.org/c/add-ons

If you're interested in add-ons and want to learn more about ways you can get involved with addons.mozilla.org, please visit:

https://wiki.mozilla.org/Add-ons/Contribute



## Head on to feedback

mzl.la/howwasit

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