

AKSHATH JAIN

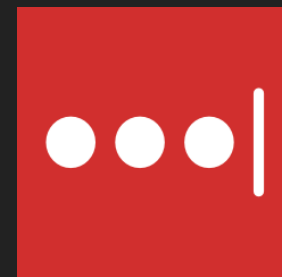
WDW 2018

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# CHROME EXTENSIONS

# CHROME EXTENSIONS?

A horrible way to add “functionality” to Chrome  
(actually pretty useful)



# BASIC STRUCTURE

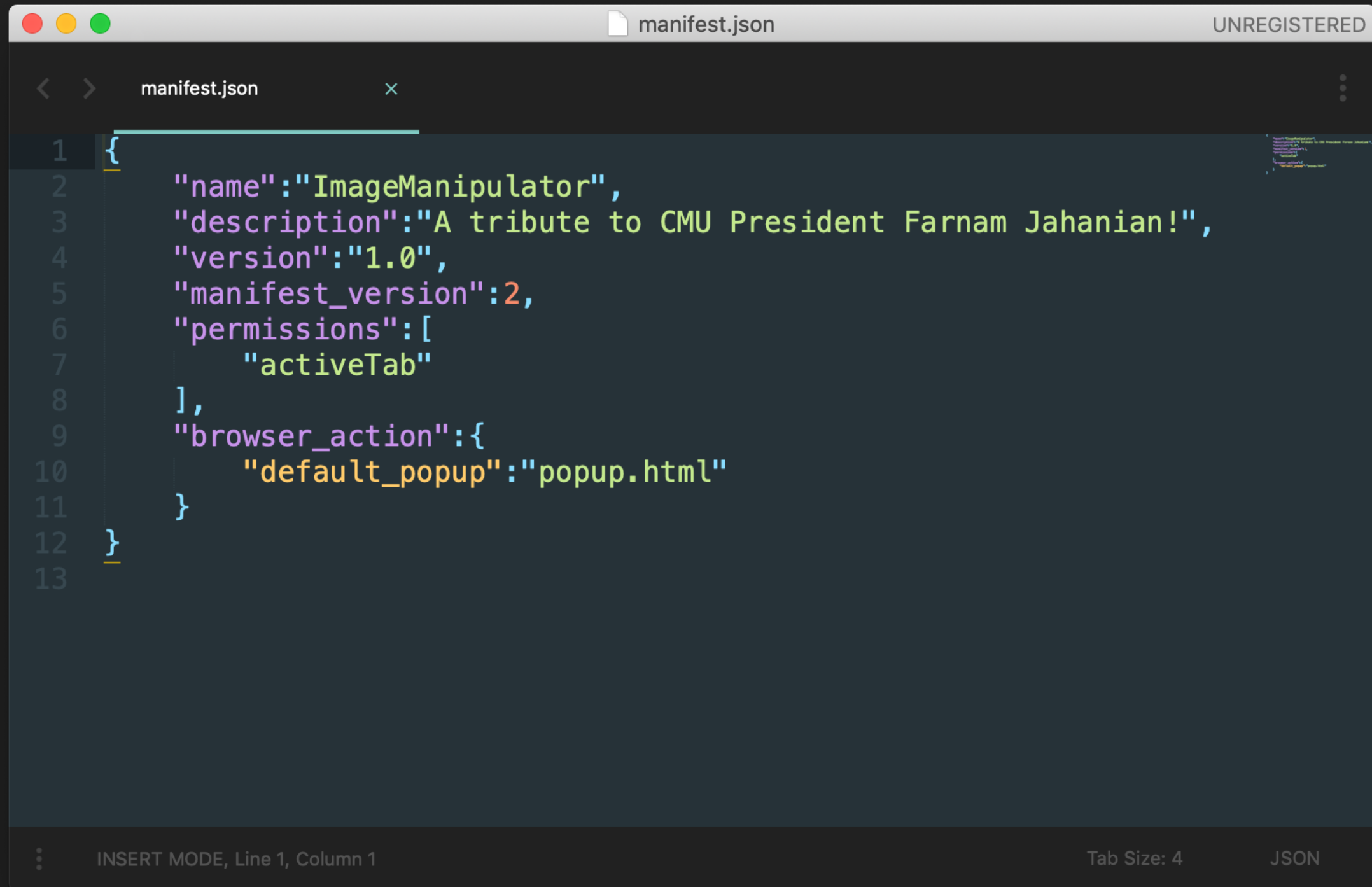
## RequiredFiles

- manifest.json
- popup.html
- popup.js

## OptionalElements

- contentScripts.js
- backgroundScripts.js

# MANIFEST.JSON



The image shows a code editor window with a title bar that includes a file icon, the name 'manifest.json', and the text 'UNREGISTERED'. The editor has a dark theme and a tab labeled 'manifest.json' with a close button. The code is a JSON object for a Chrome extension, with line numbers 1 through 13 on the left. The JSON content is: { "name": "ImageManipulator", "description": "A tribute to CMU President Farnam Jahanian!", "version": "1.0", "manifest\_version": 2, "permissions": [ "activeTab" ], "browser\_action": { "default\_popup": "popup.html" } }. The status bar at the bottom shows 'INSERT MODE, Line 1, Column 1', 'Tab Size: 4', and 'JSON'.

```
1 {  
2   "name": "ImageManipulator",  
3   "description": "A tribute to CMU President Farnam Jahanian!",  
4   "version": "1.0",  
5   "manifest_version": 2,  
6   "permissions": [  
7     "activeTab"  
8   ],  
9   "browser_action": {  
10     "default_popup": "popup.html"  
11   }  
12 }  
13
```

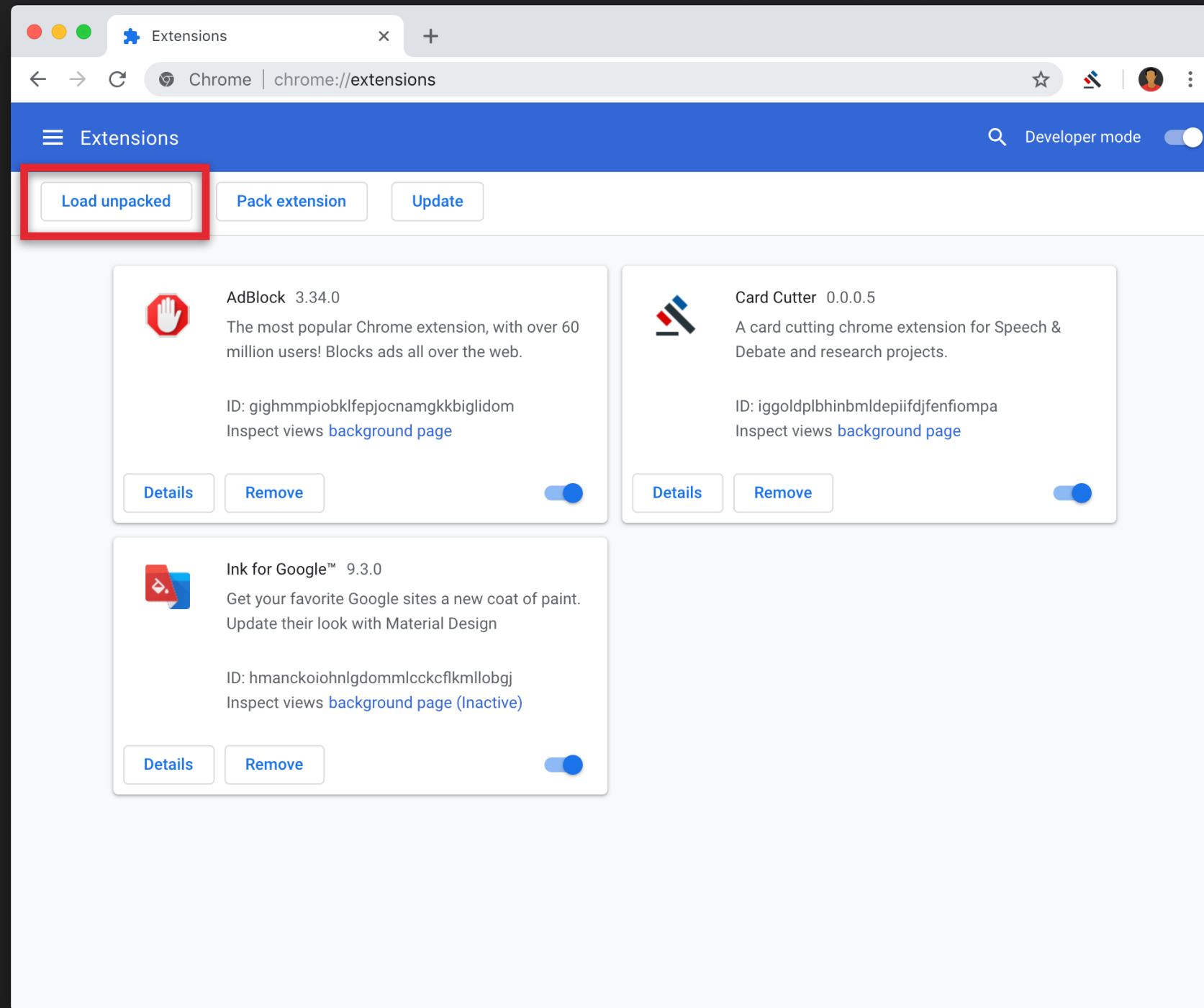
INSERT MODE, Line 1, Column 1      Tab Size: 4      JSON

# LIVE DEMO

SETTING UP THE PROJECT

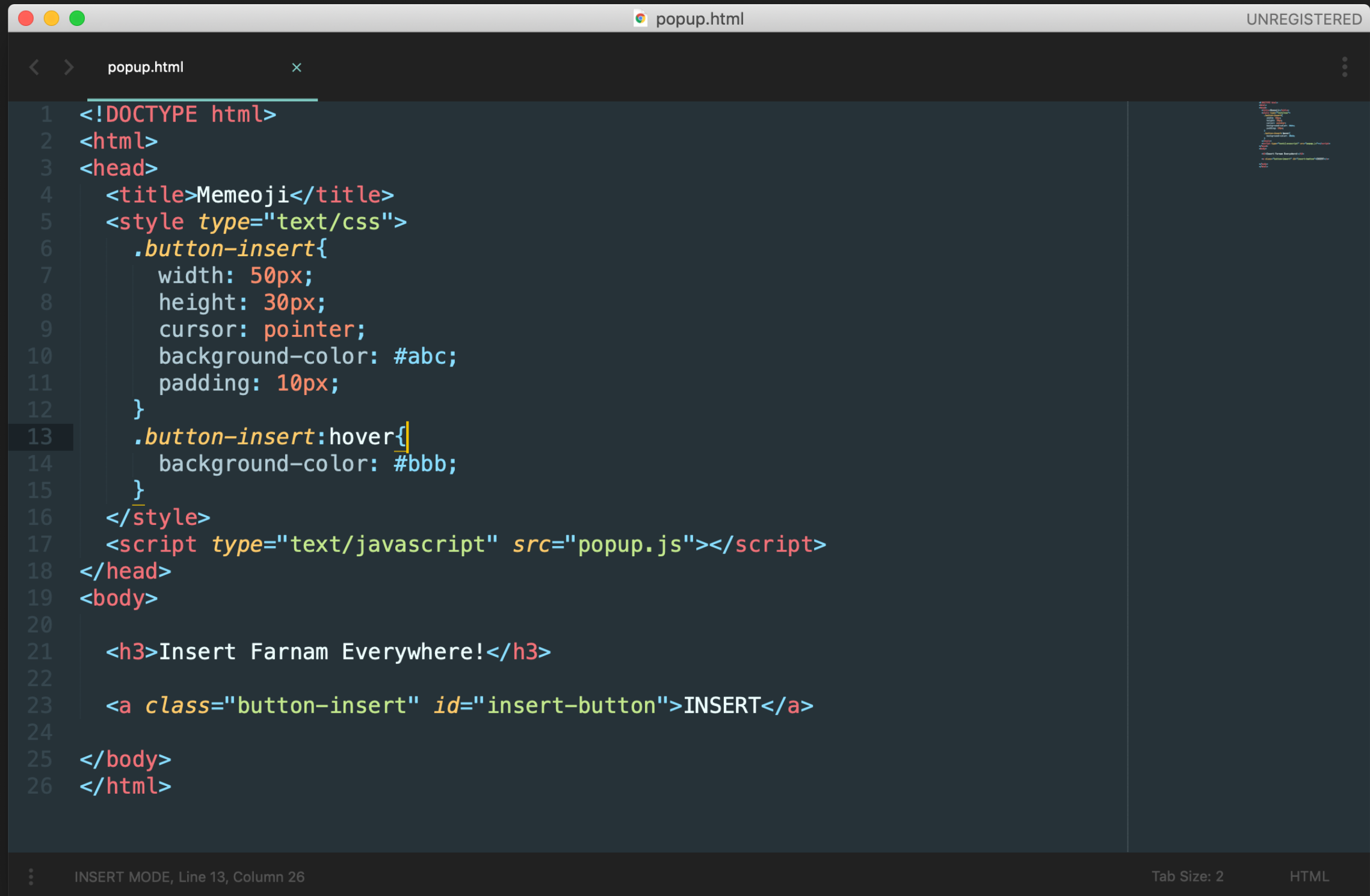
# **RUNNING YOUR EXTENSION**

# CHROME://EXTENSIONS





# POPUP.HTML



```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Memeoji</title>
5   <style type="text/css">
6     .button-insert{
7       width: 50px;
8       height: 30px;
9       cursor: pointer;
10      background-color: #abc;
11      padding: 10px;
12    }
13    .button-insert:hover{
14      background-color: #bbb;
15    }
16  </style>
17  <script type="text/javascript" src="popup.js"></script>
18 </head>
19 <body>
20
21   <h3>Insert Farnam Everywhere!</h3>
22
23   <a class="button-insert" id="insert-button">INSERT</a>
24
25 </body>
26 </html>
```

popup.html

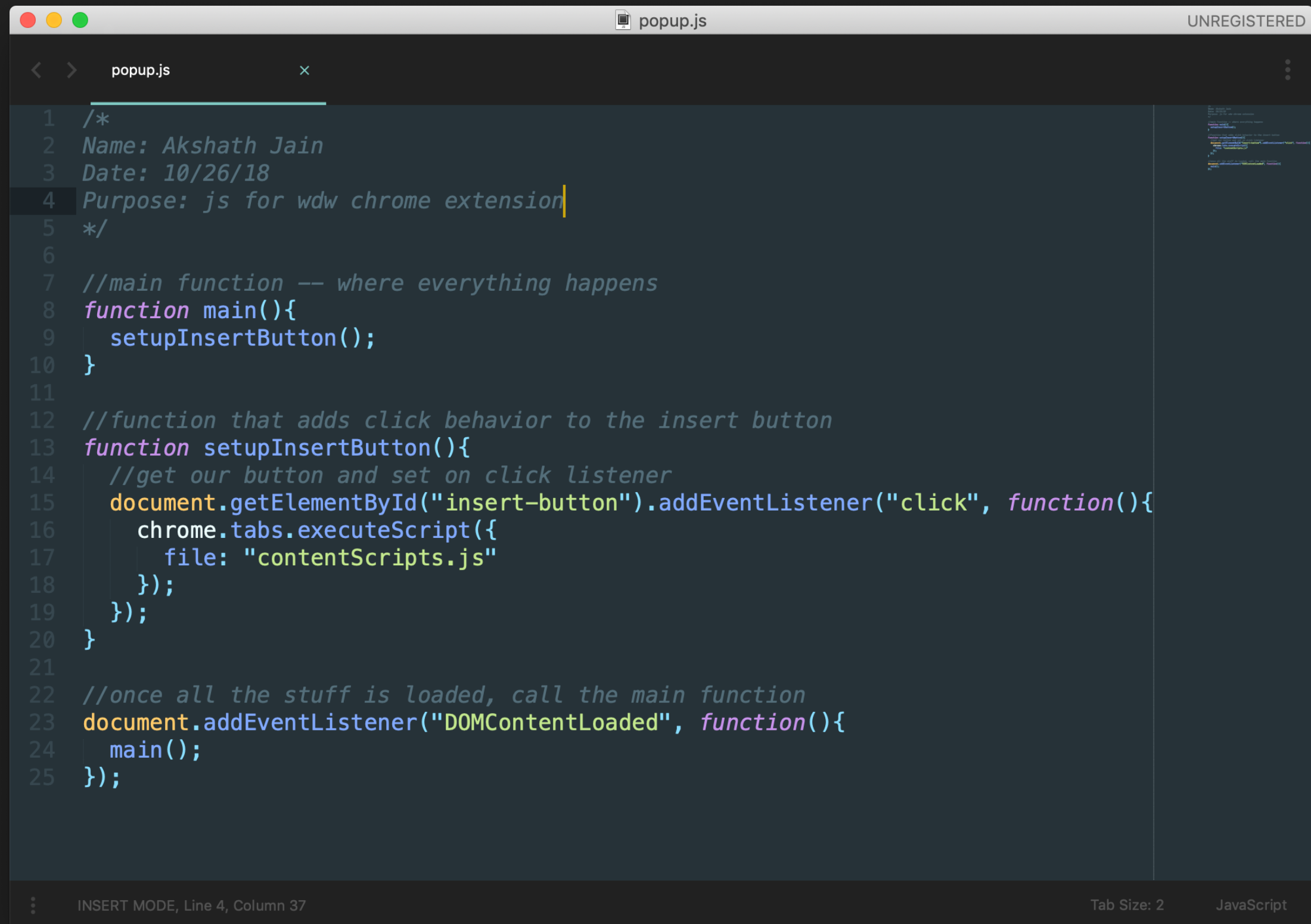
UNREGISTERED

INSERT MODE, Line 13, Column 26

Tab Size: 2

HTML

# POPUP.JS



```
1  /*
2  Name: Akshath Jain
3  Date: 10/26/18
4  Purpose: js for wdw chrome extension
5  */
6
7  //main function -- where everything happens
8  function main(){
9      setupInsertButton();
10 }
11
12 //function that adds click behavior to the insert button
13 function setupInsertButton(){
14     //get our button and set on click listener
15     document.getElementById("insert-button").addEventListener("click", function(){
16         chrome.tabs.executeScript({
17             file: "contentScripts.js"
18         });
19     });
20 }
21
22 //once all the stuff is loaded, call the main function
23 document.addEventListener("DOMContentLoaded", function(){
24     main();
25 });
```

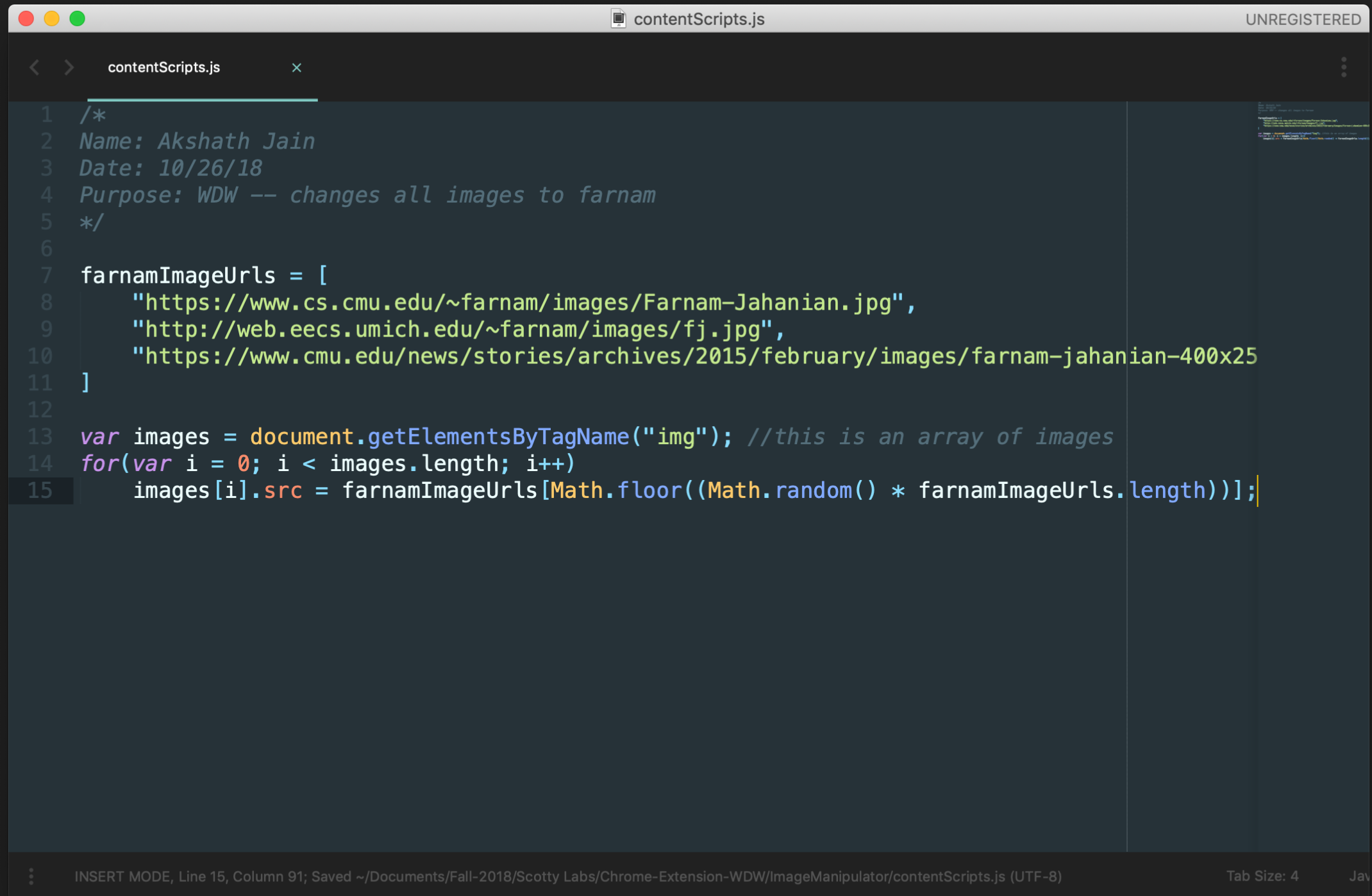
popup.js x

UNREGISTERED

INSERT MODE, Line 4, Column 37

Tab Size: 2 JavaScript

# CONTENTSCRIPTS.JS



```
1  /*
2  Name: Akshath Jain
3  Date: 10/26/18
4  Purpose: WDW -- changes all images to farnam
5  */
6
7  farnamImageUrls = [
8      "https://www.cs.cmu.edu/~farnam/images/Farnam-Jahanian.jpg",
9      "http://web.eecs.umich.edu/~farnam/images/fj.jpg",
10     "https://www.cmu.edu/news/stories/archives/2015/february/images/farnam-jahanian-400x25
11 ]
12
13 var images = document.getElementsByTagName("img"); //this is an array of images
14 for(var i = 0; i < images.length; i++)
15     images[i].src = farnamImageUrls[Math.floor(Math.random() * farnamImageUrls.length)];
```

contentScripts.js x

UNREGISTERED

INSERT MODE, Line 15, Column 91; Saved ~/Documents/Fall-2018/Scotty Labs/Chrome-Extension-WDW/ImageManipulator/contentScripts.js (UTF-8) Tab Size: 4 Jav

# LIVE DEMO

INTERFACE AND INTERACTION



# LAB

Notes++