

CSCI4140 - Tutorial 12

Assignment 3 Part 2

Simplified iReserve Bot

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# Outline

- Points to note about assignment.
- How to get iReserve Sample Code.
- Brief Flow of the extension.
- Debugging methods.
- How to submit it
- (Specification is coming 😞)



# iReserve Bot



iReserve Background Script jQuery(if neccessary)



Manifest.json Action Script



ocrad.js

\*Include them into your extension source



popup.html



popup.js



# Points to Note.

- Beware of "Content Security Policy" (CSP)
  - Some of the features do not work:
    - Inline Javascript will not be executed.
    - Only local script and object resources are loaded
- More Details: <https://developer.chrome.com/extensions/contentSecurityPolicy>



# iReserve Page

- The Source can be found at:  
<https://github.com/calvinkam/CSCI4140-iReserve>
- You can Download or git clone it to your local machine and test it.
- Default Username/Password is  
([csci4140@cse.cuhk.edu.hk](mailto:csci4140@cse.cuhk.edu.hk)/opensource)



# iReserve Page

- The Source can be found at:  
<https://github.com/calvinkam/CSCI4140-iReserve>

## SSH clone URL

git@github.com:calv:



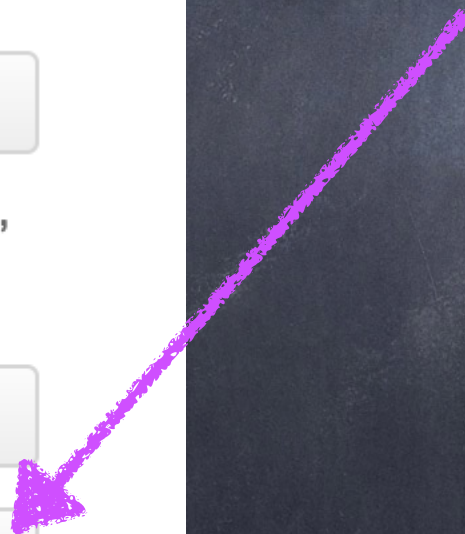
You can clone with [HTTPS](#), [SSH](#),  
or [Subversion](#). [?](#)



**Clone in Desktop**



**Download ZIP**





# iReserve Page

- The Source can be found at:  
<https://github.com/calvinkam/CSCI4140-iReserve>

```
Calvins-MacBook-Pro:CSCI4140 Calvin$ git clone git@github.com:calvinkam/CSCI4140-iReserve.git
Cloning into 'CSCI4140-iReserve'...
```



# Points to note...

- In Assignment's demo the iReserve Code may not be the same!
- We will change the text field's ID, username, password and etc..
- Never Hardcode the above things.



# Flow of iReserve Bot Extension

- Load the Extension.
- Icon should be shown next to the address bar. (Browser Action).
- Initialize the storage space if it runs for the first time.
- Inject the content script if the target URL is matched\*
- Allow user to modify settings in popup page.
- Fill the form with stored data, run the OCR Engine.
- Submit the form.



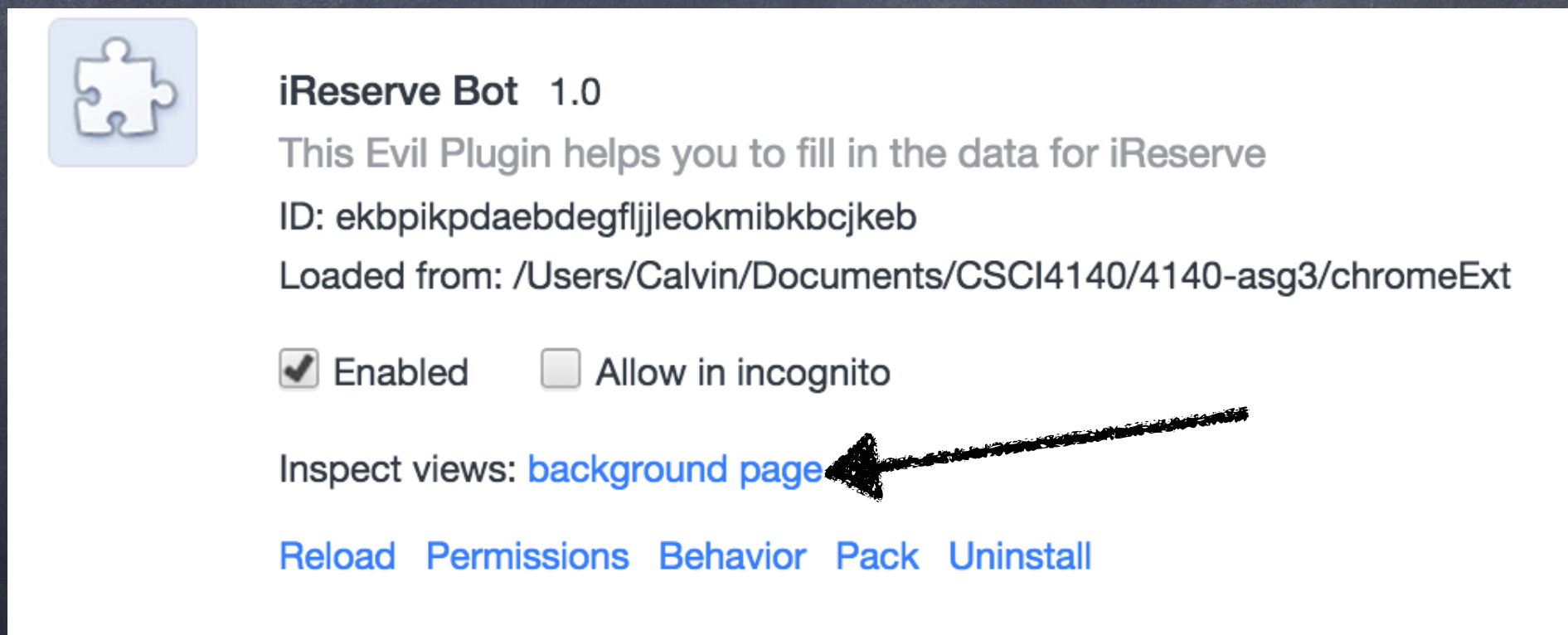
# \*Injection Target

- Please specify "[http://\\*.rhcloud.com/](http://*.rhcloud.com/)" in your manifest to allow wildcard injection to any openshift application.




# Debugging

- Tool: Chrome App & Extensions Developer Tool
- Background Script:



The screenshot shows the Chrome DevTools Extensions page for an extension named 'iReserve Bot' (version 1.0). The extension is represented by a puzzle piece icon. The description states: 'This Evil Plugin helps you to fill in the data for iReserve'. The ID is 'ekbpikpdaebdegfljjleokmibkbcjkeb'. It was loaded from the path '/Users/Calvin/Documents/CSCI4140/4140-asg3/chromeExt'. The extension is currently 'Enabled', and there is an unchecked checkbox for 'Allow in incognito'. Under 'Inspect views', the 'background page' is highlighted in blue, with a black arrow pointing to it from the right. At the bottom, there are links for 'Reload', 'Permissions', 'Behavior', 'Pack', and 'Uninstall'.

 **iReserve Bot** 1.0

This Evil Plugin helps you to fill in the data for iReserve

ID: ekbpikpdaebdegfljjleokmibkbcjkeb

Loaded from: /Users/Calvin/Documents/CSCI4140/4140-asg3/chromeExt

☒ Enabled ☐ Allow in incognito

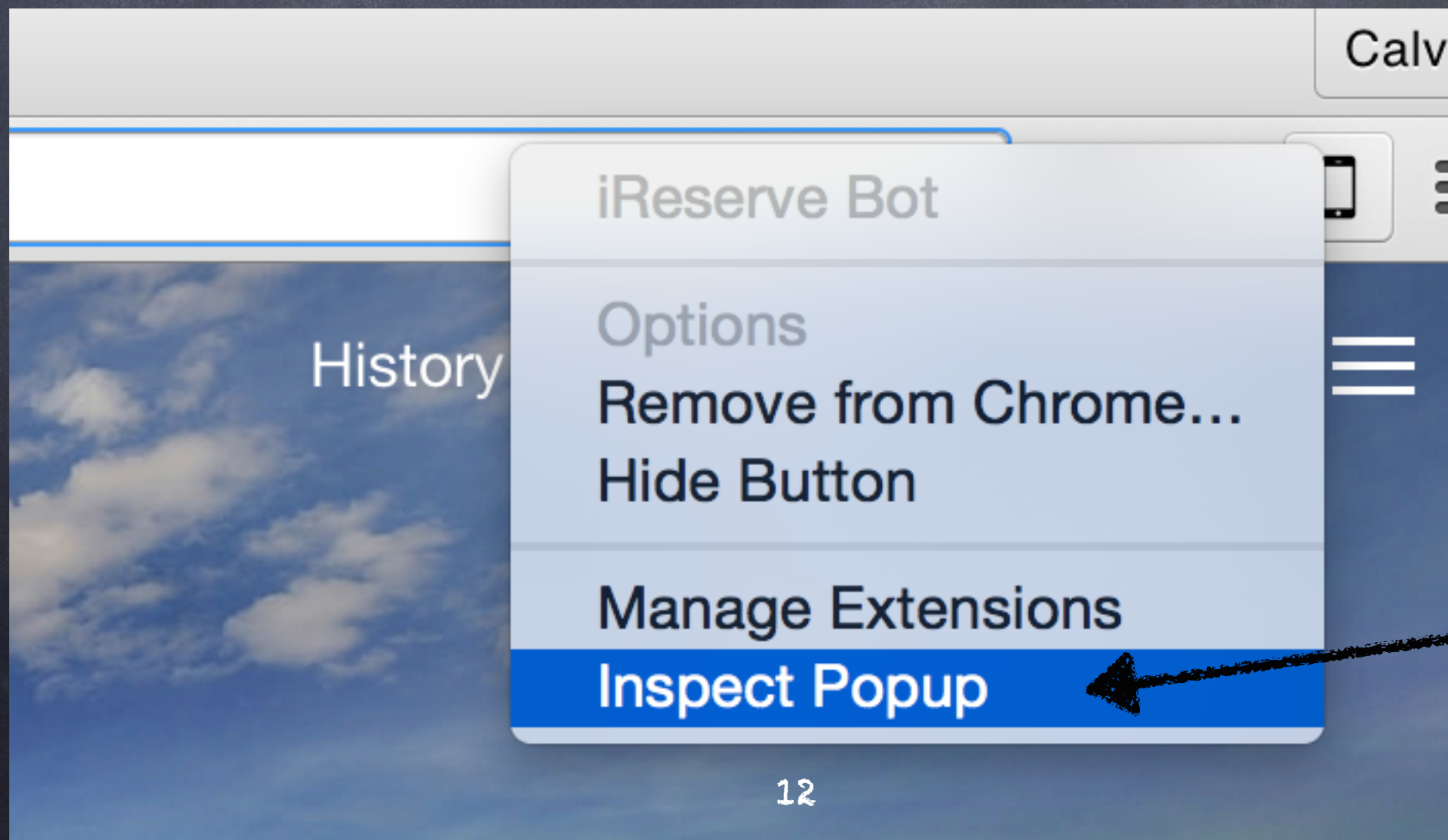
Inspect views: [background page](#)

[Reload](#) [Permissions](#) [Behavior](#) [Pack](#) [Uninstall](#)



# Debugging

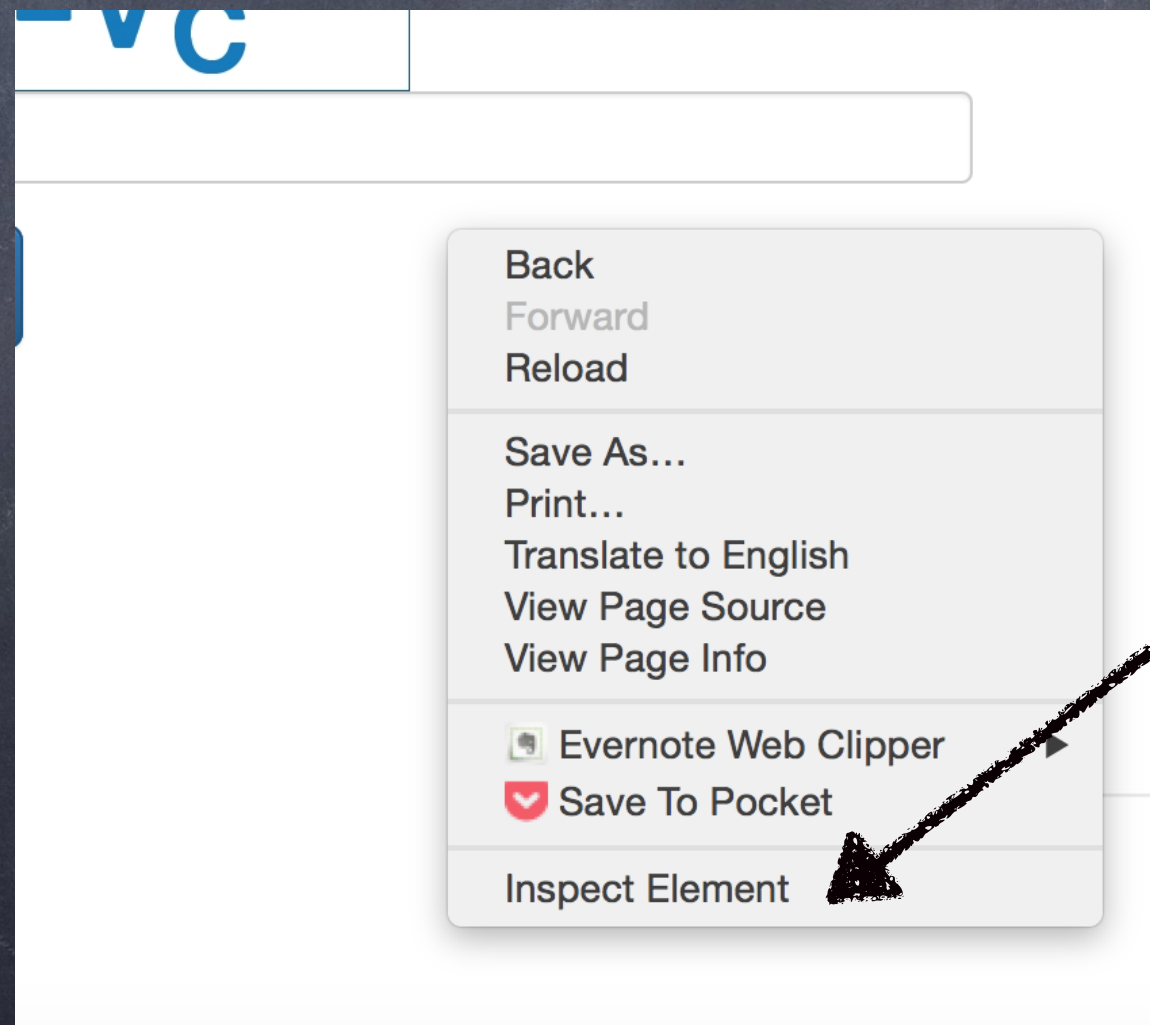
- Tool: Chrome App & Extensions Developer Tool
- popup script: right click on browser action.





# Debugging

- Tool: Chrome App & Extensions Developer Tool
- content script: inspect directly from the webpage.





# CheckList

- How do I define a Chrome Extension? [Tut 1].
- How do I save data locally? [Tut 2].
- How do I access the DOM Object? [Tut 1].
- How do I manipulate the webpage object? [Tut 1].
- How do I recognize the character? [Tut 2].



# Submission

- Submit your extension to the gitlab just like before.
- git push to asgn3 repository in GitLab.
- No need to submit the iReserve Page.



# Good Luck :)

- Free free to find me if you have any question.
- Drop me a line at [hckam@cse.cuhk.edu.hk](mailto:hckam@cse.cuhk.edu.hk)
- or Facebook Group.