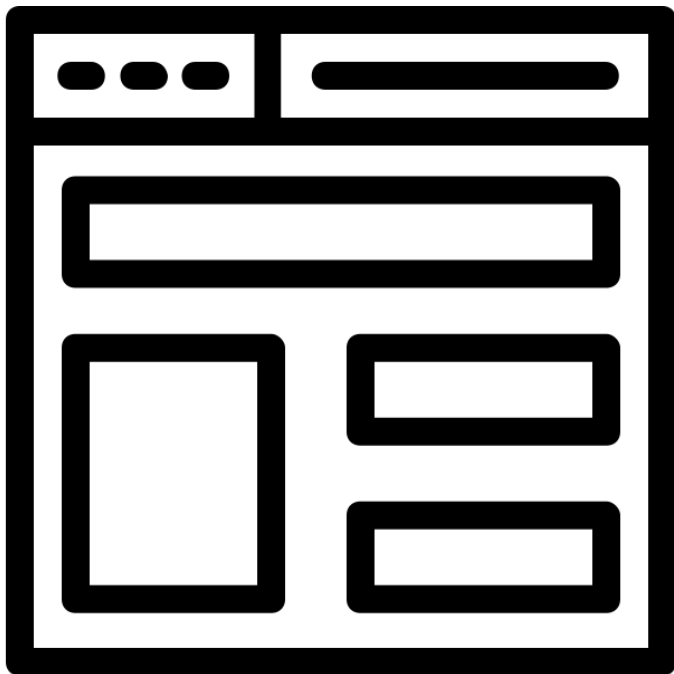


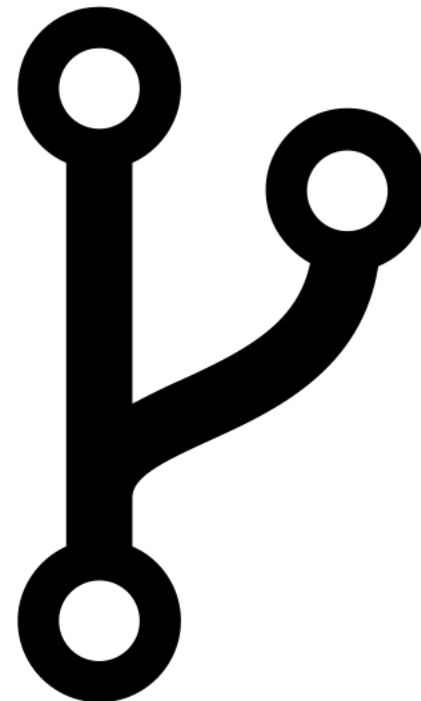
# **WORKSHOP 3**

## **:: GIT + JAVASCRIPT ::**

**INFO 30005**



+





**WARM UP...**

# STEPS

**[10 MINUTES]**

**Step 1:** Check that you have GIT installed;

**Step 2:** Sign in to your GitHub account;

**Step 3:** Select one group member who has the Student Pack to create a group repository.  
The selected student should create a repository. Initialise the repository with a readme;

**Step 4:** Add all the team members as well as your tutor, demonstrator, and lecturers to the repository that you created;

**Step 5:** Individually, clone the repository on your local machine;

# STEPS

**Step 6:** Create the HTML below as a new file (**exercise1\_<your\_last\_name>.html**) to be used as part of your exercise today (do not add CSS or JS files to your project). Please use WebStorm or your preferred text editor to create your HTML file.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title> INFO30005 :: JavaScript - Workshop #2 </title>
</head>
<body>
  <p id ='text'> Javascript DOM :: Changing paragraph style</p>
  <div>
    <button id="style" onclick="js_new_style()">New style</button>
  </div>
</body>
</html>
```

**Step 7:** Individually, add the HTML file that you have created (**exercise1\_<your\_last\_name>.html**) to your local repo and then commit and push changes to the group's repo (for now, just use one branch: master). You may need to resolve conflicts (rejects) (revisit lectures for possible commands, such as fetch, pull, push, etc);

# STEPS

**Step 8:** Each team member will now be responsible for modifying the style (font type, font size, font colour) of the paragraph text and button through Javascript code (inside the HTML file. Do not create a javascript file for this exercise). Once you finish this exercise, commit and push your answers to your repository (solves any conflicts (rejects) using knowledge from Step 7);

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title> INFO30005 :: JavaScript - Workshop #3 </title>
</head>
<body>
  <p id ='text'> Javascript DOM :: Changing paragraph style</p>
  <div>
    <button id="style" onclick="js_new_style()">New style</button>
  </div>
</body>
</html>
```

**Step 1:** click on the button ‘New style’ to see the style changes on the paragraph

**Step 2:** change the label of the button to ‘Previous style’

**Step 3:** click on the button ‘Previous style’ to see the paragraph on the original way

**Step 4:** change the label of the button to ‘New style’

**[10 MINUTES]**

# STEPS

**Step 9:** TOGETHER, you should now write a JavaScript function to get/alert the values of First and Last name of the following form. Create a .js file for that and add it to your GIT repository (you can write the function together and only one member will push the new file to the repo. **ONLY the .js file should be pushed to the repo**);

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title>INFO30005 :: JavaScript - Workshop #3</title>
</head>
<body>
  <form id="formname" onsubmit="getFormValue()">
    First name: <input type="text" name="firstname" value="Obi-Wan"><br>
    Last name: <input type="text" name="lastname" value="Kenobi"><br>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

**[12 MINUTES]**

# STEPS

[8 MINUTES]

**Step 10:** Push/commit the new JS file to your repository;

**Step 11:** After committing the new JS file to your repository, the other teammates should now pull the new files to their local repo;

**Step 12:** Each participant should, individually, use the JavaScript function to get/alert the values of First and Last name of the following form, test it and, after that, push the new html integrated with the javascript file to the repository (**exercise2\_<your\_last\_name>.html**).

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title>INFO30005 :: JavaScript - Workshop #3</title>
</head>
<body>
  <form id="formname" onsubmit="getFormValue()">
    First name: <input type="text" name="firstname" value="Obi-Wan"><br>
    Last name: <input type="text" name="lastname" value="Kenobi"><br>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

HTML FORM



# STEPS

[15 MINUTES]

**Step 13:** Pull the master branch of the repository of your team.

**Step 14:** Create a branch <your-name> from the master branch.

**Step 15:** On the branch that was just created, create a file named “group.txt” with just your name in the first line.

**Step 16:** Make a commit and push your branch (named <your-name> in step 15) to Github.

**Step 17:** Ensure that all of your team members have completed steps 13-16.

**Step 18:** Merge the branches to the master branch such that the file “group.txt” on the master branch has the names of all members.

For Step 18, ensure that:

- Everyone has a go at merging
- The person who is most confident about git makes the first merge
- Only a single person is performing the merging at one time
- Once a branch is merged to master, the master branch is pushed to Github
- The master branch is pulled from Github before further merging is made by the next person

**TODAY'S TASK IS...**



**LET'S DEVELOP A WORD-GUESSING GAME!**  
**YEEEEAAH!**

# INSTRUCTIONS

In this game, a player will try guessing letters in a word (maximum size of the word is 15 letters).

Whenever a player makes a correct guess, the tiles in the target word should be updated to show the correct guesses.

If a player makes an incorrect guess, a game board should display each incorrect guess and the total number of remaining guesses.

The maximum number of incorrect attempts is ten.

The player wins by guessing the complete word before running out of guesses.

**[1 HOUR]**

# SAMPLE HTML

```
<!DOCTYPE html>
<html>
<head>
  <meta charset=utf-8 />
  <title> INFO30005 :: JavaScript - Workshop #3 </title>

  <script src="ws3js_working.js"></script>
</head>
<body>

<center>
<div id="wordTiles">
  <!--
  <div class="char">w</div>
  <div class="char">o</div>
  <div class="char">r</div>
  <div class="char">d</div>
  -->
</div>
<br></br>
<form>
  <label>Enter your guess</label>
  <input type="text" name="guess" id="guess">
  <button>Submit</button>
</form>
<br></br>
<br></br>
Game board
<hr width=20%>
```

```
<table id="gameboard" border=1>
  <tr>
    <th>Incorrect Guesses</th>
    <td id="incorrect_guesses">000</td>
  </tr>
  <tr>
    <th>Remaining Guesses</th>
    <td id="remaining_guesses">000</td>
  </tr>
</table>
<hr width=20%>
<br></br>
<button>Set word to be guessed</button>
</center>

</body>
</html>
```

# SAMPLE JS

```
let gameState = {  
  incorrectGuesses : [],  
  remainingGuesses : 10  
};  
  
function setWord (word) {  
  //set word to be guessed  
}  
  
function validate (guess) {  
  //validate the input from the form (letter)  
}  
  
function check (guess) {  
  //check if the guess is correct  
}
```

```
function updateWordTiles (index) {  
  //update the tiles on the HTML  
}  
  
function checkEndOfGame(){  
  //check if the player has guessed the secret word or if the game is over (no more  
  //remaining guesses  
}  
  
function init () {  
  //initialise or reset the game (set new word to be guessed, clean word tiles,  
  // incorrect guesses and remaining guesses  
}
```

# UP FOR A CHALLENGE?



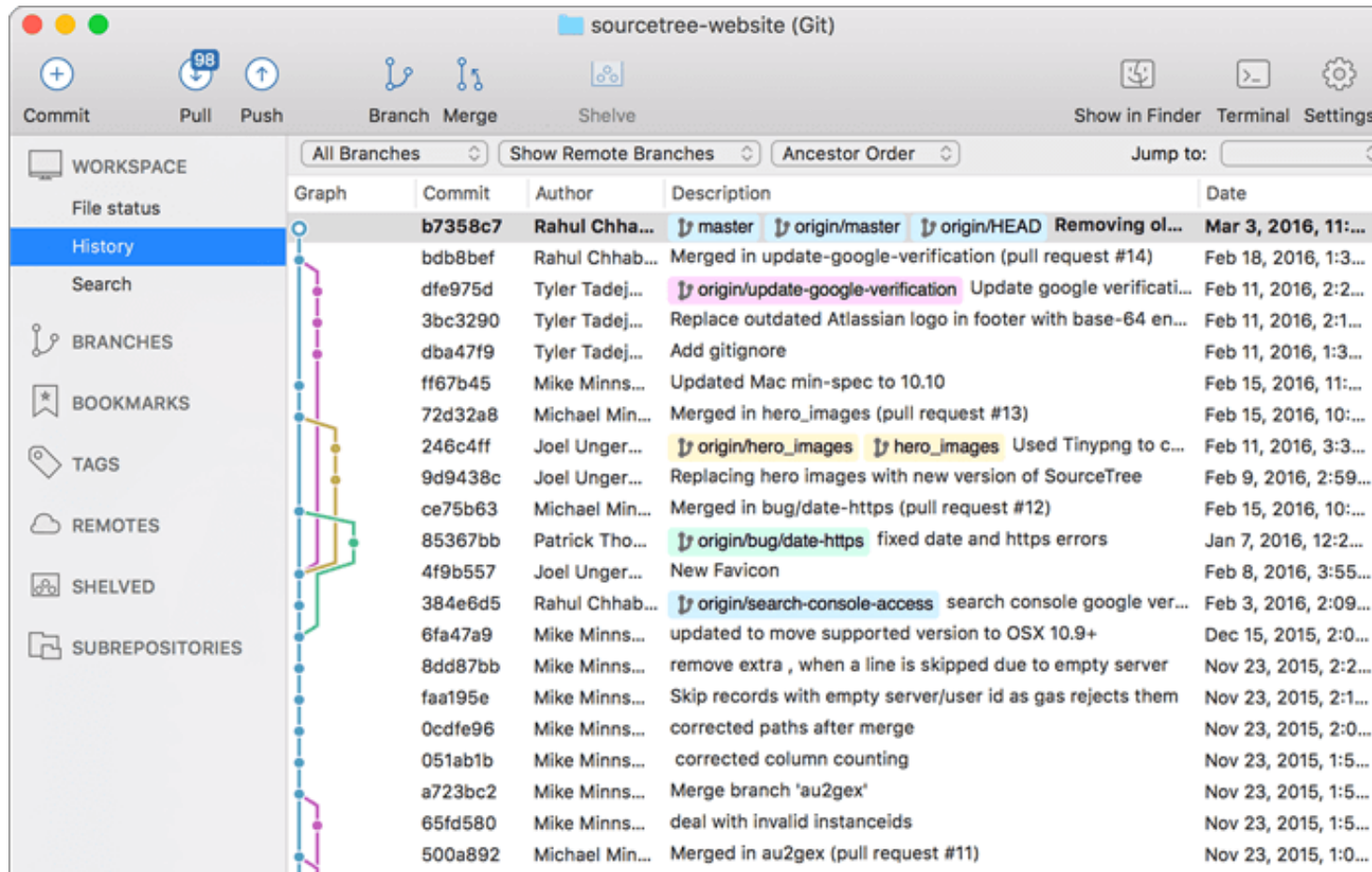
# STEPS

**Step 19:** if you are keen to work on git with visual interfaces

- download and install Atlassian SourceTree
- Integrate it with your new GitHub repository



# ATLASSIAN SOURCETREE



The screenshot displays the SourceTree application window for a repository named 'sourcetree-website (Git)'. The interface includes a top toolbar with actions like Commit, Pull, Push, Branch, Merge, and Shelf. A left sidebar shows navigation options: WORKSPACE, File status, History (selected), Search, BRANCHES, BOOKMARKS, TAGS, REMOTES, SHELVED, and SUBREPOSITORIES. The main area features a commit history table with columns for Graph, Commit, Author, Description, and Date. The table lists various commits, including merges and updates, with the most recent commit being 'b7358c7' by Rahul Chhabra.

Graph	Commit	Author	Description	Date
	<b>b7358c7</b>	Rahul Chha...	<a href="#">master</a> <a href="#">origin/master</a> <a href="#">origin/HEAD</a> Removing ol...	Mar 3, 2016, 11:...
	bdb8bef	Rahul Chhab...	Merged in update-google-verification (pull request #14)	Feb 18, 2016, 1:3...
	dfe975d	Tyler Tadej...	<a href="#">origin/update-google-verification</a> Update google verificati...	Feb 11, 2016, 2:2...
	3bc3290	Tyler Tadej...	Replace outdated Atlassian logo in footer with base-64 en...	Feb 11, 2016, 2:1...
	dba47f9	Tyler Tadej...	Add gitignore	Feb 11, 2016, 1:3...
	ff67b45	Mike Minns...	Updated Mac min-spec to 10.10	Feb 15, 2016, 11:...
	72d32a8	Michael Min...	Merged in hero_images (pull request #13)	Feb 15, 2016, 10:...
	246c4ff	Joel Unger...	<a href="#">origin/hero_images</a> <a href="#">hero_images</a> Used Tinypng to c...	Feb 11, 2016, 3:3...
	9d9438c	Joel Unger...	Replacing hero images with new version of SourceTree	Feb 9, 2016, 2:59...
	ce75b63	Michael Min...	Merged in bug/date-https (pull request #12)	Feb 15, 2016, 10:...
	85367bb	Patrick Tho...	<a href="#">origin/bug/date-https</a> fixed date and https errors	Jan 7, 2016, 12:2...
	4f9b557	Joel Unger...	New Favicon	Feb 8, 2016, 3:55...
	384e6d5	Rahul Chhab...	<a href="#">origin/search-console-access</a> search console google ver...	Feb 3, 2016, 2:09...
	6fa47a9	Mike Minns...	updated to move supported version to OSX 10.9+	Dec 15, 2015, 2:0...
	8dd87bb	Mike Minns...	remove extra , when a line is skipped due to empty server	Nov 23, 2015, 2:2...
	faa195e	Mike Minns...	Skip records with empty server/user id as gas rejects them	Nov 23, 2015, 2:1...
	0cdf96	Mike Minns...	corrected paths after merge	Nov 23, 2015, 2:0...
	051ab1b	Mike Minns...	corrected column counting	Nov 23, 2015, 1:5...
	a723bc2	Mike Minns...	Merge branch 'au2gex'	Nov 23, 2015, 1:5...
	65fd580	Mike Minns...	deal with invalid instanceids	Nov 23, 2015, 1:5...
	500a892	Michael Min...	Merged in au2gex (pull request #11)	Nov 23, 2015, 1:0...



# ATLASSIAN SOURCETREE

☒ Staged files

☒ + files/added.txt

☒ - files/deleted.css

☒ ... files/modified.css

☒ R files/renamed.js

☒ R files/new\_location/move\_me.js

☐ Unstaged files

☐ ... files/modified.css

605 + .button.button-link:focus,

606 + .button.button-link:hover,

607 + .button.button-link:active,

608 + .buttons .button.button-link:focus,

609 + .buttons .button.button-link:hover,

610 + .buttons .button.button-link:active,

611 + .buttons .button.button-link[aria-pre

612 + .button.button-text:focus,

613 + .button.button-text:hover,

614 + .button.button-text:active,

615 + .buttons .button.button-text:focus,

616 + .buttons .button.button-text:hover,

617 + .buttons .button.button-text:active,

618 + .buttons .button.button-text[aria-pre

624 619 background: transparent;

625 620 border-color: transparent;

626 621 box-shadow: none;

627 622 text-decoration: underline;


628 623 }

629 - .aui-button.aui-button-text,

630 - .aui-button.aui-button-text:visited

624 + .button.button-text,

625 + .button.button-text:visited {



Commit message



# **:: GIT + JAVASCRIPT ::**

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