

Web Information Technologies, Semester 1 2020

**School of Computing and Information Systems
The University of Melbourne**

Workshop 3: Git and JavaScript

Objectives

1. To setup the GitHub repository for the group project
2. To demonstrate a basic understanding of JavaScript.

Zoom Meetings

If you are unable to be present in-person in the workshops due to travel sanctions, we provide support via Zoom for you to join the workshop online. Please note that you will need Zoom software to be able to join the meeting.

1. Your tutor has created a Zoom meeting for you to join the class via Zoom. We will try our best to provide you with video access to your tutor, but we may end up with text-based communication. I hope you will be understanding of any technology-related issues.
2. The Zoom links are available under Week 1 block. Please click on the Workshop 1 page to find the links.
3. The meeting time is local Melbourne time (AEST).
4. Click on the Zoom meeting for your particular workshop day and time.
5. Some sessions may require you to register or provide a password. When required to register, please enter your details. Where passwords are required, these will be provided with the meeting link. NOTE: Some meetings may not require a password.
6. Once in the meeting, please liaise with your tutor to help you get into groups. Please be patient as your tutor takes time to assign you into groups.

Activity 1: Setting up Project Repository

In this activity, you will create a repository that your group will use as the project's repository. Choose one group member who will create the repository and provide access to the group's project repository to all members and the teaching staff.

Follow the steps listed in the Workshop 3 Presentation (Slides 4-9) on Canvas. These slides have step-by-step instructions.

Activity 2: Word Guessing Game: Introduction to JavaScript

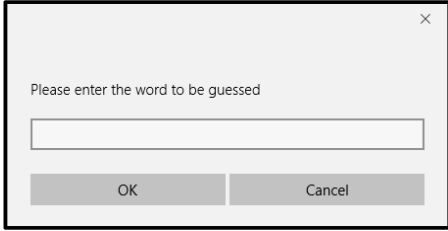
Activity 2 is an individual activity that will give you an opportunity to learn the basics of JavaScript. You will create a simple and fun game while learning JavaScript. You can use the sample HTML and JavaScript files provided in Canvas. You are free to create your own as well.

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

At the start, ask for the word to be guessed, e.g. 'javascript', and then prepare and display the word tiles.

The screenshot on the right provides an example where the word tiles are displayed vertically with an underscore (" _ ") for each letter not guessed correctly.

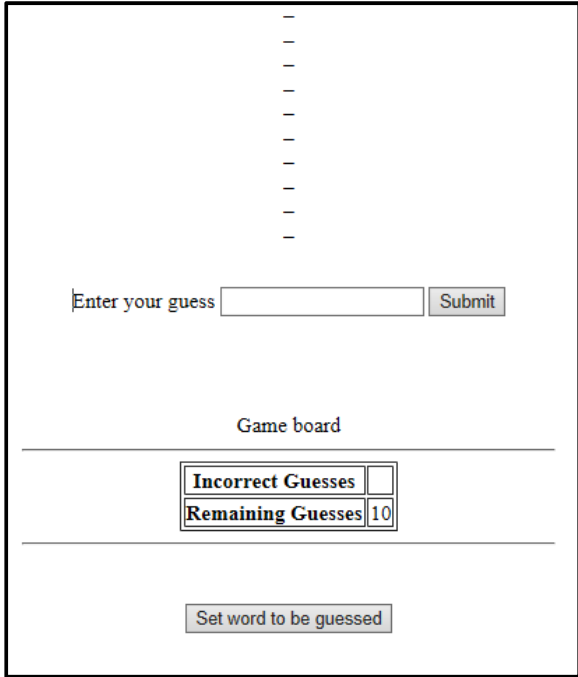
You don't have to do everything, as shown in the screenshots; you are free to decide how the word tiles are displayed. E.g. you may want to display the word to be guessed horizontally, as shown below.



A small dialog box with a close button (X) in the top right corner. The text inside says "Please enter the word to be guessed". Below the text is a single-line text input field. At the bottom are two buttons: "OK" and "Cancel".



The interface shows a dashed line at the top for the word. Below it is a text input field with the placeholder "Enter your guess" and a "Submit" button. Underneath is a section titled "Game board" which contains two rows: "Incorrect Guesses" with an empty box and "Remaining Guesses" with the value "10". At the bottom is a button labeled "Set word to be guessed".



The interface shows a vertical word display consisting of ten underscores. Below this is a text input field with the placeholder "Enter your guess" and a "Submit" button. Underneath is a section titled "Game board" which contains two rows: "Incorrect Guesses" with an empty box and "Remaining Guesses" with the value "10". At the bottom is a button labeled "Set word to be guessed".

Whenever a player makes a correct guess, the tiles in the target word should be updated to show the correct guesses, e.g. in the screenshot on the right, a player tried letter 'a' as the first attempt when the word to be guessed was 'javascript'.

If a player makes an incorrect guess, a game board should display each incorrect guess and the total number of remaining guesses, e.g. the player has tried 'x' as the second attempt, which is incorrect. The screenshot below displays what happens in this case.

The screenshot shows a vertical column of ten dashes representing the target word. The second dash from the top is replaced by the letter 'a'. Below this is a text input field containing 'a' and a 'Submit' button. Underneath is a 'Game board' section with two boxes: 'Incorrect Guesses' (empty) and 'Remaining Guesses' (containing the number 9). At the bottom is a button labeled 'Set word to be guessed'.

The screenshot shows the same vertical column of dashes. The second dash is replaced by 'a', and the eighth dash is replaced by 'x'. Below is a text input field containing 'x' and a 'Submit' button. The 'Game board' section shows 'Incorrect Guesses' with 'x' and 'Remaining Guesses' with '8'. The 'Set word to be guessed' button is at the bottom.

The modal dialog box has a title bar with a close button (X). The text inside reads: 'This site says...' followed by 'You have run out of time :(We will reset.' At the bottom right is an 'OK' button.

The maximum number of incorrect attempts is ten after which the game should restart.

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

The modal dialog box has a title bar with a close button (X). The text inside reads: 'This site says...' followed by 'You have won!!! Let's try another word.' Below this is a checkbox labeled 'Don't let this page create more messages'. At the bottom right is an 'OK' button.

Suggested Quick Online Readings:

- DOM: https://www.w3schools.com/js/js_htmldom.asp
- JavaScript data types: https://www.w3schools.com/js/js_datatypes.asp
- Array manipulation: https://www.w3schools.com/js/js_arrays.asp