# JavaScript Course Plan

Note: This course is based on the documentation provided in MDN web docs.

### Day 1

### Class course plan

- Discussion on what the class is going to cover
- Introduction to github / Revisit
- Introduction to Web (DOM, HTML, CSS) and how it works
- Introduction to JavaScript
  - What is JavaScript?
  - o A first splash into JavaScript
  - o Debugging JavaScript code
  - Using variables
  - o Basic math in JavaScript
  - JavaScript strings
  - o JavaScript methods for strings
  - JavaScript Arrays

#### Assignment #1

• Silly story generator (refer <u>here</u>)

#### Day 2

#### Class course plan

- Discussion/Review/Presentation of assignment #1
  - Some students will be randomly selected to present their assignment
- Applying conditions in JavaScript
- Loops in JavaScript
- Functions in JavaScript
- Introduction to events

#### Assignment #2

• Image gallery (refer <u>here</u>)

## Day 3

### Class course plan

- Discussion/Review/Presentation of assignment #2
  - Some students will be randomly selected to present their assignment
- Introduction to objects in JavaScript
- Instantiating objects in JavaScripts
- JavaScript as a prototype-based language
- Inheritance in JavaScript
- Transmitting data using JSON
- Building games using JavaScript

#### Assignment #3

• Enhance the game built in class (refer <u>here</u>)

#### Day 4

#### Class course plan

- Discussion/Review/Presentation of assignment #3
  - Some students will be randomly selected to present their assignment
- Introduction to web APIs
- Manipulating documents
- Fetching data from the server
- Third party APIs
- Drawing graphics
- Video and audio APIs

#### Assignment #4

• Make something interesting (refer everywhere you feel the need to)

# Day 5

### Class course plan

- A reintroduction to JavaScript
- Data structures in JavaScript
- Equality comparisons and sameness
- Open Discussion on Javascript and its richness

# Assignment #5

• TBD