

Commentary of Coursework 2: Final Game Project

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Extensions:

- **Sound:** Add sound effects when jumping, hitting(enemy), falling, losing and winning
- **Platform:** Using factory pattern to build some random platforms
- **Enemies:** Using factory pattern to create moving enemies
- **Splashscreen:** Show the splash screen with instructions for the game
- **Timer:** Adding a countdown timer to the game – the character has to reach the flagpole in time otherwise it loses one life.
- **Inserting Image to the scene:** Inserting image function to platform and house which is next to the flagpole
- **Class Libraries:** Create multiple JavaScript libraries for collecting some close-related functions in one place and attach these external JavaScript files such as scene, enemy, platform and other game items to the game page.
- **Object Constructors:** Some game scenarios are generated by using object constructors such as trees, clouds, platforms...

Bits I found difficult:

- 1) Naming Functions - I refactor many code into functions to make it easier to understand and find bugs during the development. However, sometimes I was struggling to come up with a meaningful name for the function. Some function names even make me feel a bit confused at that time.
- 2) Logical Mindset - The program becomes complex and challenging due to adding more features into it. Some features are related to another feature and need to be edited. It is quite easy to get bugs at this time.

The skills I learnt in completing the game project

I am happy to learn a lot of fundamental coding skills through my first game development project. Except for those basic skills, I have learnt that

- 1) It is important to decide on a firm idea of the game design and know what to build before the development. At the beginning of the project, the code was written in a hurry without any design or plan. I have been modifying the design while doing it. It made me waste a lot of time while doing the code.
- 2) Organizing the code by using the factory pattern and constructor function. The code becomes easier to make improvements. Besides, it is a good way to write clean and efficient code by removing duplicate code to make it more readable.