

Lab Assignment 1 (COMP3421 Fall 2015)

10%

Due Oct 24, 2015 at 11:55pm.

All submissions should be done via BB.

The assignment is to develop one game using XHTML/HTML5, CSS3 and Javascript. You are free to implement the UI of the games in English or Chinese (Traditional/Simplified). All the files created for the questions should be stored in a single zip file (with file name *chan_tai_man*Asg1.zip, substitute *chan_tai_man* by your full name) and submitted through BB before the deadline. Assessment criteria will be based on the correctness of the games, appropriate consideration of the players, and techniques applied.



Space Invaders

Action video games may improve visual concentration in the neurocognitive therapy. You are asked to design a traditional video game, Space Invaders (reference at https://en.wikipedia.org/wiki/Space_Invaders & https://www.youtube.com/watch?v=437Ld_rKM2s) with the following additional requirements:

- Welcome screen for the user to start the game.
- The game can have two levels. It can have 11 x 5 (easy) enemies or 15 x 7 (difficult) enemies. A user should have an option to determine the levels.
- The game starts with random number of obstacles. The obstacles will be destroyed after three attacks.
- The player will be destroyed after one attack. For each game, there are three chances for the player.
- The game stops if the maximum time exceeds or the chance becomes zero or the user chooses to reset the game.
- Once the game starts, all the movements of player are controlled by the keyboard.
- Audio and sound effect are required.
- Animation of enemies is required.
- Movement of enemies is required. Enemies are able to perform the attack. You may choose not to include any intelligence or heuristics in the program for the winning of the game.
- Enemies will move toward to the player when the time decreases.
- The marks of different enemies are 10 for the first row, 20 for the second row and so on.

Grading Criteria

- Functionality (70%)
- Aesthetics (10%)
- Game Design (10%)
- Correct submission (10%)