

Assignment 2 (COMP3421 Fall 2016)

The assignment has 3 questions and is due Nov 24, 2016 at 11:55pm. All submissions should be done via BB.

The assignment is to repeat the 2 games in the previous using XHTML/HTML5, CSS, PHP, Ajax, jQuery 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. For each game, you need to provide an URL for testing also.

Question 1 (Pong Hau Ki, 50 marks)

You are asked to repeat Question 1 in the previous assignment with some extended requirements. In this new version, the game allows two players on different computers to share the same game board. When a player moves a piece, the other player sees the new position of the piece. Some additional requirements are:

- ~~Re-implement the game with jQuery.~~ (optional)
- A game board that supports the movement of pieces by a user, and periodically getting position information about the pieces from a server.
- A server program (written in PHP) to keep track of the positions of all pieces. It allows the clients to update the piece positions, and also to fetch positions.
- Players need to register their personal information (including a geo-location) and the system should record the number of games which a player has won.
- A map can be displayed to show all the players geo-locations with markers. Each marker would include an info-window to show the game results of the corresponding player.
- ~~GoogleChart is used to support the display of graphs. Bar charts will be used to show the top 5 winning players by age group, gender and overall.~~

The above requirements/conditions may not be completed. Suggest and include those defined by you.

Question 2 (Breakout, 30 marks)

You are asked to repeat Question 2 in the previous assignment with an extension to support android platform. It is suggested to consider the use of the PhoneGap (<http://phonegap.com/>) or similar tool for your work. For your selected tool, there should be no cost or licensing requirement for installation and deployment. Some revised requirements are stated below.

- Only 1 paddle is used for the game.
- There are different sizes of the ball for a player to select.
- Bricks are of different colors with different scores associated.

Question 3 (Peer Questioning, 20 marks)

In this question, we would like to get your help in creating multiple choice questions for other fellow students. We will use PeerWise to support the operations of this question.

- Design and develop a multiple choice question for each topic of Ajax, PHP database connections and Google API.
- Each question should have 4 possible answers and you need to provide the correct. For each question, assign a difficulty level (hard, moderate and easy). The 3 questions you develop should be of 3 different levels. Also, every question should be distinct and no copying from others.
- Answer 2 questions from your peers. Provide the answer, the reason of selecting this answer and rate the difficult level of the question also.

Take a look at http://cft.vanderbilt.edu/guides-sub_pages/writing-good-multiple-choice-testquestions/ for some ideas/suggestions in writing good MC questions. We will have the set up ready around the first week of Nov.