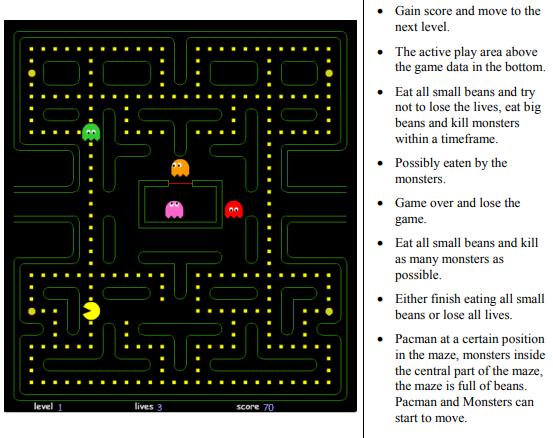
course-sunday

**Department of Information Technology**

**ITP4707 GAME SOFTWARE DEVELOPMENT AND ASSURANCE**

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| **Tutorial 2 – Game Design (Prototyping)** |

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|  | 1. State any TWO purposes of constructing a game prototype at the early stage of a large scale computer game development project.   To show the actually plays before too much time or money is spent on developing the game,  To test technical issues early in development.   1. Given that Interactive prototype is a common type of prototype for computer games. For each of the following statements regarding Interactive prototype, state whether the statement is true or false.   Statement 1 : An Interactive Prototype is suitable for Fighting games. (true)  Statement 2 : An Interactive Prototype can be used for testing complex gameplay  mechanics and complicated interactions. (false)  Statement 3 : An Interactive Prototype is usually created using a commercially  available software/game engine. (true)  Statement 4 : The game art and characters in an Interactive Prototype must be the  same as the final version of the computer game. (false)   1. Identify the most suitable type of prototype (answered in part (b)) for each of the following types of game:   (i)  chess games   **Paper prototypes**  (ii)  shooting games **Storyboards and flowcharts**  (iii)  adventure games **Interactive prototypes**   1. Briefly explain the meaning of “Character Description” in Character Design.   Describing the character’s outfits and introducing the character’s story background simply.   1. Characters in the game will have particular attributes depending on the game genre. List ANY TWO of them.   Health points,  Speed or acceleration,  (Strength, skill, Mana points)   1. If you are asked to design the user interface for a car racing game, state FIVE important pieces of game play information to be included in the On Screen Display.   Ranking number of the player’s current rank priority,  timer of the game remaining time,  map of the whole racetrack,  speed of the player’s car,  the round number of the player has gone through.   1. For each of the following statements regarding User Interface Design, state whether it   is true or false.  Statement 1 : (true)  One main function of user interface is to let player make decisions quicker.  Statement 2 : (false)  The trend of User Interface Design is to increase in play complexity and decrease in development complexity.  Statement 3 : (false)  Screen size should not be a consideration in User Interface Design.  Statement 4 : (false)  A good User Interface Design is to challenge the players and let them struggle to master it.   1. Sometimes sound effect may play an important role in a computer game. State what types of sound effect need to be designed for this aspect for an adventure game.   Background music, player’s interaction with the items or objects.   1. A Game Design Document may also include Project Management documents. State TWO project management related items that can be included in a Game Design Document.   Development timelines of project planning,  Asset management,  Budget estimation (or development team). |
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| 2 | 1. There are eight basic elements in building a game level. Given that Beginning and Ending are two basic elements, name the other SIX elements in game level design.   Concept, Environment to exist in, Goal, challenge to be overcome by the player, Reward when the goal is achieved, and Way of handling failure – Punishment.   1. For the famous Pacman game, state TWO problems if there are 50 levels and the ONLY difference between any two consecutive levels is the speed of monsters increased by 5%?   First, the game level has low dynamic, the player will get bored easily.  Second, the monsters’ speed will get extremely fast, the game’s difficulties will become unreasonable and extremely hard.   1. Suggest TWO improvements to the given level design of the Pacman game mentioned in part (b).   First, design more game maps for different levels.  Second, design more interactive items or obstacles to increase the levels difficulties instead of increasing monsters’ speed.   1. There are three main goals in user interface design of a computer game. The first goal is Interaction which allows a player to interact with the game. What are the other TWO goals?   Information which displays information about the setting, characters, objects, and events in the game;  Entertainment which is about the visual element adds value to the playing experience.   1. Briefly explain why Simplicity is a determining factor on whether an interface design is good or not.   The player shouldn’t have trouble to figure out how to handle the controller interface to play the game. So, simple UI can show the information on the screen when the player needs it.   1. Give TWO factors other than Simplicity for good computer game user interface design.   Consistency, Immersion. |

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