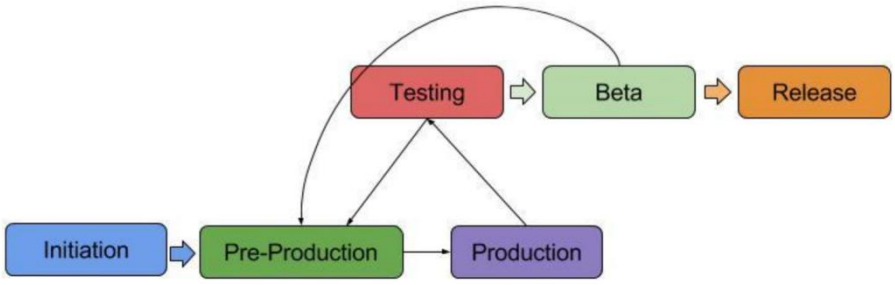
Game Programming Intern Application Evaluation Assignment Answers

1. An illustration of the Game Development Life Cycle is given in the figure below. I also noted how much development time each phase should take in my opinion.



Development Time Percentages	
Pre-Production:	25%
Production:	45%
Testing:	15%
Beta:	15%
Post-Production:	(ongoing)

We have already completed the Initiation phase, so we can start the project with Pre-Production stage. After obtaining a product that qualifies to exit the Pre-production, Production and Testing loop, we can continue with Beta test. If we decide that the game is ready for shipping, we move on to the Post-Production(Release) phase.

2.

a. These 5 mechanics can be:
   i. Movement/walking
   ii. Jump
   iii. Attack
   iv. Victory condition
   v. Resource mechanics (game points etc)

b. The following questions should be answered for each mechanics respectively:
   i. How fast should the characters walk?
      Can they control the jump in mid-air?
   ii. How high can the characters rise?
      How fast do they fall?
      Can they jump again in mid-air?
      If yes, how many times can they jump again, and how is the jump style?
   iii. How do characters attack each other?
      Do they have guns?
      If yes, how far do these guns reach?
      How much damage do these guns do?
      How many times a character should be hit until it dies?
   iv. Which conditions should be met to win the game?
   v. Are there pick-ups in the game?
      How does the scoring system work?

4.

a. The main strategy I followed here was to separate character controller scripts and game management, UI management scripts. Basically UI Manager interprets the user inputs (whether it is touch input or joystick input), and communicates with the game manager and character controller through static events. This way, any of these instances don't need to reference the other. Through the usage of static events, we also eliminate the risk of creating cyclic dependencies.