**ANGIOGAME**

Test Plan

Jacob Culley & Russell Short

Testing an Android app:

-Testing Support Library:

-AndroidJUnitRunner

-Espresso (UI Testing)

-UI Automator

-Monkey

-monkeyrunner

Testing Game:

-Alpha / Beta Tests to select users

Testing Medical Accuracy:

-Certification by Medical Doctor or American Medical Association

Component testing:

-Blood vessel and artery generation testing to ensure that the procedurally generated terrain is accurate.

-Testing the accepting and completing of missions and their objectives to ensure they are working properly.

-Combat testing to ensure that combat processes player and enemy actions appropriately.

-Crew control testing to ensure that crew attributes affect the correct actions.

Failure modes:

-When the software encounters the force close interrupt

Software attempts to quickly save that it was interrupted unexpectedly

-When the software fails to update or install correctly

Before updates are applied, data files will be backed up before installation to be restored in the event of a failure.

-When the player ends up out of the normal bounds of gameplay, i.e. outside of the blood vessel or artery, or finds their way into an area that they haven’t yet unlocked.

Software will return the player to the nearest allowable location.

Integration testing:

-Testing app with several different Android devices to ensure software is compatible with more than one piece of hardware.

Acceptance Testing:

-Test software’s overall reliability with hardware stress tests

-Ensure that when errors are encountered by a player, that they aren’t a hindrance to their overall gameplay experience and kept as descriptive as possible.

System recovery procedures:

-Software will periodically save the player’s game state to their auto save file so that progress can be picked up with little or no loss to game experience. Upon the loading of the software, the recovery variable will be checked to see if the previous game was interrupted. If found, the software will load the player’s previous game state.