Chicken Zombie Bonanza Test Plan COP 4331C Processes of Object Oriented Software Fall 2011

Team 19 - Team (Cauc)asians

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Modification history:

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v0.0	08/15/00	G. H. Walton	Template
v1.0	9/22/2011	Bernard Feeser	Updated template with names, sent to others
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Contents of this Document

Introduction

- Overall Objective for Software Test Activity
- Reference Documents

Description of Test Environment

Overall Stopping Criteria

Description of Individual Test Cases

Overall Objective for Software Test Activity:

To ensure, at least, the serious defects in the application are found and fixed to ensure all software requirements are met

Reference Documents

- Concept of Operations
- Project Plan
- Software Requirements Specifications

Description of Test Environment

Standard development and testing will be done with an Android 2.2 OS emulator with debugging through the Eclipse SDK as it is convenient and fast. However, the problem with this is that the emulator does not represent actual hardware and potentially does not represent all the nuances of different physical devices. It is because of this that we will have a physical Android 2.2 OS device to do final testing.

Stopping Criteria

We will continue development, marking all minor errors, until a fatal error is encountered. After which the major problem will be fixed and the process will begin again with another team member testing this time. Once we have completed an major error-free round of testing, each group member will test the application to verify that no other major errors exist. At that point the project is ready for delivery, however minor errors may be fixed after that which will only require a single successful round of major error-free testing to make the project ready for delivery again.

Test Case 1:

- Test Objective: To test the GPS and map capabilities of the android device.
- Test Description: We will use an android GPS enabled device, and the data we can acquire from it. We will see how well it functions under various conditions. We will see how it collect data.
- Test Conditions: We must first see if the map appears, and how well the GPS device tracks the user. Which will be as simple as turning it on and walking around. We will then see how well it can track the user inside places that might cause interference, such as inside a building with very thick walls and dead zones.
- Expected Results: We expect the device to function as well as any GPS that is currently on the market. It would be able to track the user reasonably well, and will give out data expected from the android SDK.

Test Case 2:

- Test Objective: Testing the test map play area.
- Test Description: Upon getting gaining the user's GPS location, a play area will be generated. Where the user, or more specific the android device, "moves around" on the map viva actually physically moving by the user moving it from place to place.
- Test Conditions: The android device will load the new software, and take in the data. It will then generate the play area, and the user will then walk around and see if the map actually moves with the player from place to place.
- Expected Results: We expect that the software will be able to track the location as the hardware was design to do.

Test Case 3:

- Test Objective: To see if the user can interact with the spawn points.
- Test Description: The user will walk with the android enabled device to "objective points" located on the GPS map. To see their position in reality actually moves and activate the "objectives" at the current point.
- Test Conditions: We will see if, after generating a play area with the GPS enabled device, that the user can move through the area to interact with the "objective points". To see if they can "activate" the objective points.
- Expected Results: We expect the user will be able to to interact with the "objective points". Since they simply will have the same location value.

Test Case: 4

- Test Objective: To see if the program switches to the "shooter mini game"
- Test Description: A upon the user reaching the way point, the game will switch the to "shooter mode"
- Test Conditions: When the user reaches the "objective position" with the device. This will have the game switch to a "shooter mode". We will test this by reach the position stated by the game.
- Expected Results: The game will switch classes easily and switch to "shooter mode"

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Test Case: 5

- Test Objective: To see if the gyroscope functions with the device.
- Test Description: While running in "shooter mode" we will see if the the view changes when the user moves the physical device in various directions.
- Test Conditions: The android device will be moved around in the users hand. Any physical attributes with the environment should not be an issue at this point any more then it would for any regular physical device aside from the need for space around the user to move the device around. There will be a sprite place on the screen to see if the device is indeed moving in location.
- Expected Results: We expect the device to change the location of the sprite, as if you where to turn your head away in real life and objects you are looking at you are "moving away". To see if the perspective changes.

Test Case: 6

- Test Objective: To see if the "shooter mode" shoots projectiles, and has them destroy enemies, thereby causing the user's score to increase, or causing the users health to drop.
- Test Description: The user will attempt to try to shoot zombie chickens, using their phone as a gun.
- Test Conditions: The test will involve the user moving around the android device, and tapping the screen to fire bullets as zombie chicken sprites spawn and move closer towards them. If they reach the user, the user loses health. If the user loses too much health, they lose the game. Prompting the game to end.
- Expected Results: We expect the bullets will fire. The bullets will cause the sprites to disappear increasing the users score and decreasing the amount of enemies on the screen. If the user allows chickens to get too close, they will lose their health. If too many hit the user, the user loses and the game ends.

Test Case: 7

- Test Objective: Game ending(due to having 0 health) and a score screen will appear.
- Test Description: While in the "shooter mode" the user will see if dropping to 0 health will cause the game to end and show their total score.
- Test Conditions: The user will play as normal, but will be hit too many times by the chickens.
- Expected Results: If executed correctly, the output should show a total score for the amount of chickens slain, way-points reached, and time.

Test Case: 8

- Test Objective: Upon completion of a shooter game. The game will continue to map screen.
- Test Description: When the last chicken is slain, the game will revert to the map screen with a new way point ready for them to reach.
- Test Conditions: After the user eliminate the last remaining chicken. The game will revert the map screen.
- Expected Results: We expect the game to switch with little to no issue.

Test Case: 9

- Test Objective: Items are picked up and added to you inventory. Allowing you to use them.
- Test Description: When on the map screen, the user can pick up various "power ups" can be picked up and added to you inventory. While in the "shooting mode" you can use your inventory during the attack, and their effects will be used.
- Test Conditions: The user will play through the game like normal. While they play, as well as "objective points" spawning, items will spawn as well. If the user approaches the same location as an item, they will "pick it up". It will then be added to their inventory. They will then continue to a "objective point" to

see if when they enter the "shooting mode" they can use the items collected. Items would all be helpful to the player, such as restoring health, or eliminating multiple zombie chickens at once in an instants.

• Expected Results: The items will be added to the inventory screen. Their Icon will show up. When clicked on in shooting mode they will be used.

Test Case: 10

- Test Objective: Setting changes.
- Test Description: When the user changes settings in the settings menu, the game will change to reflect the changes.
- Test Conditions: The setting menu has several options that reflect various variables such as play area, sound, difficulty, etc. The user will change these settings and will see if the game changed because of it. Such as the setting "play area" will cause the play area to get smaller.
- Expected Results: We expect that the corresponding variables will change with the area they effect.

Template created by G. Walton (GWalton@mail.ucf.edu) on March 28, 1999. Last modified by Sarah Applegate on September 9, 2011.