Milestone 5
Singularity Software
May 10, 2012

Integration Testing

Without true integration tests, we are using example applications to drive integration testing of our emulator. No one application includes each available portion of our emulator, but complete coverage is attained by testing each of the three example applications.

CubeTest: CubeTestApp is a simple (read "not fun") game which responds to cube manipulations by changing the background color of the manipulated cube. This application exploits the following functionalities:

- Filling background color
- Cube tilting (all four directions)
- Cube screen press
- Cube flip
- Cube shake
- Pause application event handling
- Resume application event handling

FractionOrdering: FractionOrderingApp is a fun (and educational!) game that serves as an entertaining way to learn fractions. Each cube displays a unique, nonzero fraction. The player must arrange the cubes from left to right such that the fractions are in an increasing order. When they are successful at arranging two cubes relatively, they are met with a confirmation message, and when all of the cubes are ordered correctly, a reassuring vote of confidence is played. However, when cubes are placed in an incorrect order, the user is confronted with a failure message. This application exploits the following functionalities:

- Filling background color on a cube
- Displaying images on cubes
- Playing sounds in the emulator
- Checking cube neighbors
- Drawing rectangles on the cube

WordMaker: WordMakerApp is a fun (and educational!) game that serves as an entertaining way to learn new words or practice spelling. Each cube displays a letter. The player must arrange the cubes from left to right such that the letters spell out an English word. Successes and failures are met with responses like in the FractionOrderingApp. This application exploits the following functionalities:

- Filling background color on a cube
- Displaying images on cubes

- Playing sounds in the emulator

- Checking cube neighbors

These integration tests cover the major functionality of the Sifteo cubes as integrated into our emulator. Other features, like pausing/resuming, exception handling, and zooming, are tested on the emulator only and don't require integration testing with the applicaations. In essence,
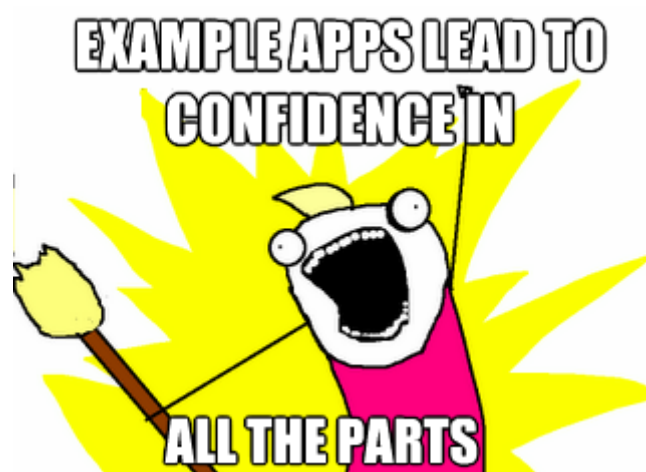
Code Maintenance Plan

Sprints 4 Backlogs

The following pages show the backlog for the previous sprint (sprint 4).

Backlog	(None)	In Progress	Completed	Summary
S–01024 **Example game: Reflex game** Ethan 6.00		**Implement Reflex game** Ethan 3.00		Test Results: To Do: 3.00
S–01027 ~~Documentation: Code Maintenance Plan~~ (Accepted) Richard 3.00			~~Write Code Maintenance Plan~~ Richard 0.00	Test Results: To Do: 0.00
S–01028 ~~Documentation: All Deliverables –> ANGEL~~ (Accepted) Alex 0.50			~~Submit Documentation~~ Alex, Kurtis, Ethan, Richard 0.00	Test Results: To Do: 0.00
S–01030 ~~Emulation: Pause/Resume Application~~ (Accepted) Kurtis 5.00			~~Add UI Pause/Resume Button~~ Kurtis 0.00 ~~Implement Pause/Resume Model Events/Functionality~~ Kurtis 0.00	Test Results: To Do: 0.00
S–01031 ~~Development: Continuous Integration Server~~ (Done) Alex 5.00			~~Install CI Server~~ Alex 0.00 ~~Configure CI Builds~~ Alex 0.00 ~~Configure CI Test Runs~~ Alex 0.00	Test Results: To Do: 0.00
S–01032	~~Test Application~~ Richard		~~Build Application~~ Richard	

Example Game: Word Ordering		0.00		0.00	Test Results:
Accepted					To Do: 0.00
Richard 5.00					
S-01033 Emulation: Exception Handling				Add UI Exception Reporting Element	Test Results:
Accepted				Alex 0.00	To Do: 0.00
Alex, Kurtis 3.00				Catch Exceptions in ViewModel	
				Kurtis 0.00	
S-01034 Documentation: MS5				Write Milestone	Test Results:
Accepted				Alex, Kurtis, Ethan, Richard 0.00	To Do: 0.00
Alex, Kurtis, Ethan, Richard 3.00					
S-01035 UI: Refine Zoom				Refine zoom	Test Results:
Done				Alex 0.00	To Do: 0.00
Alex 3.00					