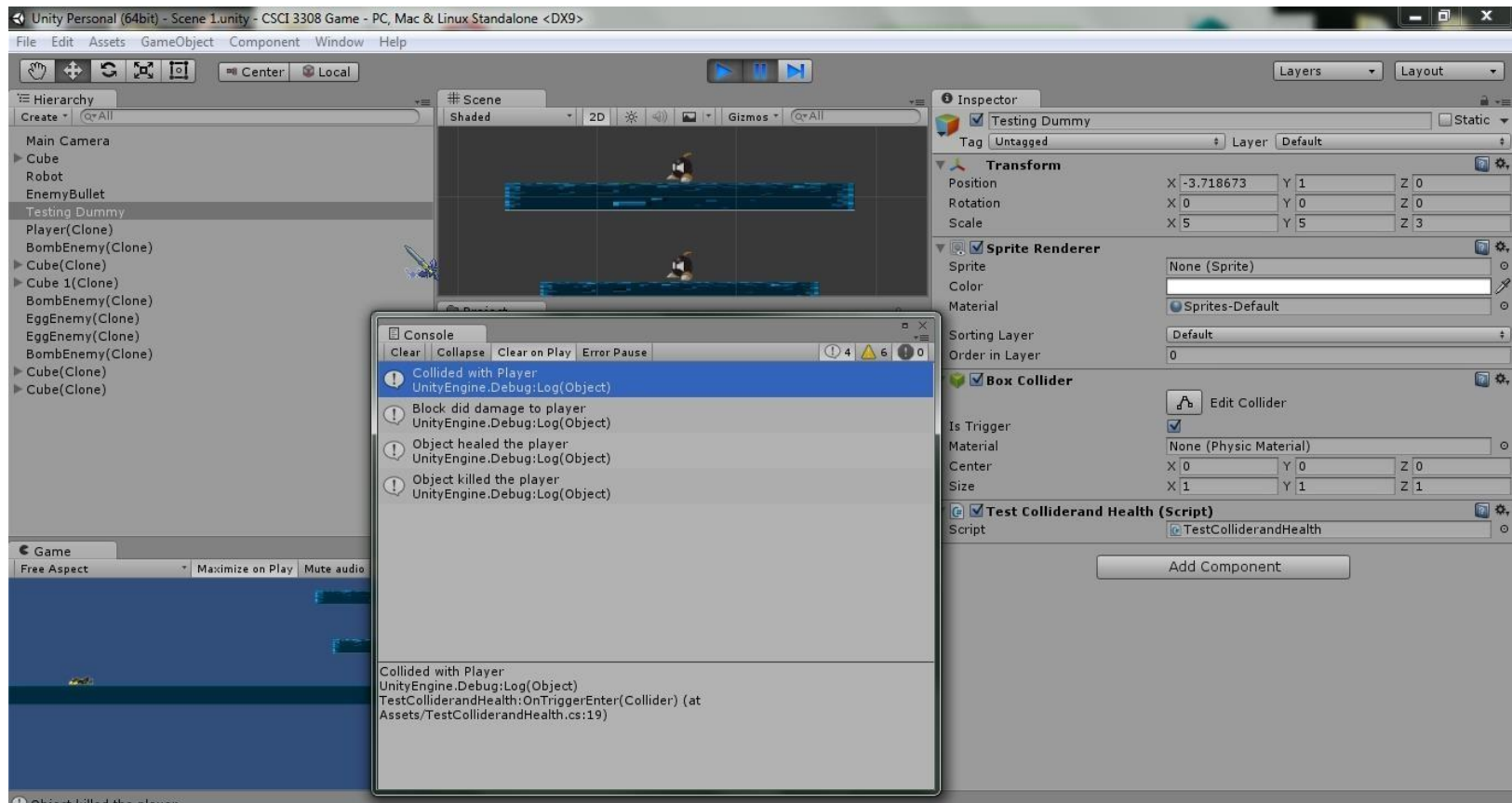**Title:** Unity Platformer

Vision: "To make a game that uses ideals from old-school platformers, while making it as playable and addicting as today's mobile app games."

Who: Jonathan Mai, Eric Thuc Tran, Michael Chung, Justin Tang **Automated**

Tests:

Automated tests were run in the Unity5 engine. Each automated test checked variable values and printed out message if values changed to expect value. The automated test checks to see if the character collided with an object if their colliders share the same vector value. It also checks to see if blocks damaged the player by comparing the health value of the player before and after collision. If the post-value is less than the pre-value, then the block damaged the player. A test is run to see if an object heals the player by comparing post and pre health values. If the post value is greater than the pre value, the object healed the player. An object kills a player if the health value of the player returns 0.

User Acceptance Tests:

System Test Case:
Unity Platformer
USER STORY U2: Player Collision and Health+ Death System

Purpose: Verify the user story U2 (all parts).

Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.

Test Run Information: **Tester Name:** **Date(s) of Test:** Location/server being used:	**Prerequisites for this test:** None
	Software Versions: Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows
	Required Configuration: [browser setup, security or user ID roles] No special setup needed

NOTES and RESULTS:

TEST SCRIPT STEPS/RESULTS					
STEP	**TEST STEP/INPUT**	**EXPECTED RESULTS**	**ACTUAL RESULTS**	**Requirements Validated**	**PASS/FAIL**
Test Collisions and examine health of player after collisions after starting the game					
1.	Start the game and have the player spawn onto allocated floor	Player should not fall through the floor			

TEST SCRIPT STEPS/RESULTS					
STEP	**TEST STEP/INPUT**	**EXPECTED RESULTS**	**ACTUAL RESULTS**	**Requirements Validated**	**PASS/FAIL**

No.	Action	Expected Result		Req. ID	
2.	Press the Left Mouse Button	Player should jump landing on the floor again and not go through the floor			
3.	Check player collision from above by jumping into a platform located above	Player should hit platform with "head" and not go through			
4.	Check side collisions and health decrement by running into an enemy bomb	Player should explode the bomb and the health should decrease			
5.	Check side collisions and health increase by running into a health pack	Player should make health pack disappear and the health should increase			
6.	Check player death by running into enemies until health is equal to or below zero	Animation of the death of the player should play and the player object should be destroyed			
7.				R3.7.56	
8.				R3.7.55, R3.7.59	
Alternative Flow 1: Player running into the side of obstacles shouldn't affect the player					
9.					
10.					
11.					
12.					
Alternative Flow 2: If the player is dead, no objects should be colliding with anything.					
TEST SCRIPT STEPS/RESULTS					

STEP	TEST STEP/INPUT	EXPECTED RESULTS	ACTUAL RESULTS	Requirements Validated	PASS/FAIL
13.					

System Test Case:

Unity Platformer

USER STORY U2: Player Controls Functionality&Animations+Sound

Purpose: Verify the user story U2 (all parts). Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.	

Test Run Information: **Tester Name:** **Date(s) of Test:** Location/server being used:	Prerequisites for this test: None
	Software Versions: Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows
	Required Configuration: [browser setup, security or user ID roles] No special setup needed

NOTES and RESULTS:

TEST SCRIPT STEPS/RESULTS					
STEP	TEST STEP/INPUT	EXPECTED RESULTS	ACTUAL RESULTS	Requirements Validated	PASS/FAIL
Test the user controls for Player after starting the game					
1	Press the Left Mouse button	Player Should Jump			

STEP	TEST STEP/INPUT	EXPECTED RESULTS	ACTUAL RESULTS	Requirements Validated	PASS/FAIL
2.	Press the Middle Mouse Button	Player Should Roll(move units forward)			
3.	Press the Right Mouse Button	Player Should Shoot			
TEST SCRIPT STEPS/RESULTS					
4.	Press the Left Mouse Button	Animation of player jumping and Sound should play			
5.	Press the Middle Mouse Button	Animation of player rolling and Sound should play			
6.	Press the Right Mouse button	Animation of player shooting and Sound should play			
7.				R3.7.56	
8.				R3.7.55, R3.7.59	
Alternative Flow 1: Any Other button on the Keyboard and Mouse shouldn't result in changes to the player					
9.					
Alternative Flow 2: If the player is dead, player control functionality should not exist					
10.					

System Test Case:
Unity Platformer
USER STORY U2: Destructible Object Spawning + Collision

Purpose: Verify the user story U2 (all parts). Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.	
Test Run Information: **Tester Name:**	**Prerequisites for this test:** None

Date(s) of Test:			**Software Versions:**		
Location/server being used:			Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows		
			Required Configuration: [browser setup, security or user ID roles] No special setup needed		
NOTES and RESULTS:					

	TEST SCRIPT STEPS/RESULTS				
STEP	**TEST STEP/INPUT**	**EXPECTED RESULTS**	**ACTUAL RESULTS**	**Requirements Validated**	**PASS/FAIL**
Test the object spawners					
1	Start the game and have the player spawn onto allocated floor	Player should not fall through the floor.			
2.	Run the program	Objects should spawn from left side of screen and move towards player			
3.	Let player run into objects	Objects should be destroyed on collision and damage the character.			
Alternative Flow 1: If the player is dead, objects should cease to spawn.					
4.					

System Test Case:
Unity Platformer

USER STORY U2: Destructible Object Damage + Sounds + Animations

Purpose: Verify the user story U2 (all parts).

Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.

Test Run Information: **Tester Name:** **Date(s) of Test:** Location/server being used:	**Prerequisites for this test:** None
	Software Versions: Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows
	Required Configuration: [browser setup, security or user ID roles] No special setup needed
NOTES and RESULTS: 	

	TEST SCRIPT STEPS/RESULTS				
STEP	**TEST STEP/INPUT**	**EXPECTED RESULTS**	**ACTUAL RESULTS**	**Requirements Validated**	**PASS/ FAIL**
Test the object features					
1	Start the game and have the player spawn onto allocated floor	Player should not fall through the floor.			
2.	Run the program	Objects should spawn from left side of screen and move towards player			

3.	Use Right mouse to shoot objects.	Objects should be destroyed on collision and play sounds and death animation.			
4.					
Alternative Flow 1: If the player is dead, objects should cease to spawn.					
5.					

System Test Case:
Unity Platformer
USER STORY U2: Enemy Spawning + Enemy Collision

Purpose: Verify the user story U2 (all parts).	
Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.	
Test Run Information: **Tester Name:** **Date(s) of Test:** Location/server being used:	**Prerequisites for this test:** None
	Software Versions: Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows
	Required Configuration: [browser setup, security or user ID roles] No special setup needed
NOTES and RESULTS:	

STEP	TEST STEP/INPUT	EXPECTED RESULTS	ACTUAL RESULTS	Requirements Validated	PASS/ FAIL
	TEST SCRIPT STEPS/RESULTS				
	Test the enemy spawners				
1	Start the game and have the player spawn onto allocated floor	Player should not fall through the floor.			
	TEST SCRIPT STEPS/RESULTS				
2.	Run the program	Enemies should spawn from left side of screen and move towards player			
3.	Let player run into enemies	Enemies should be destroyed on collision and damage character			
	Alternative Flow 1: If the player is dead, enemies should cease to spawn.				
4.					

System Test Case:

Unity Platformer

USER STORY U2: Enemy Movement + Sound

Purpose: Verify the user story U2 (all parts).

Instructions: Anything in **RED** is mandatory, everything else is optional and should only be put in if it is needed to clarify how the test was performed.

Test Run Information: **Tester Name:** **Date(s) of Test:** Location/server being used:	Prerequisites for this test: None
	Software Versions: Application: Unity Version 5.0 Browser [used & those COTS supports]: N/A Database: N/A Operating System: MAC IOS or Windows
	Required Configuration: [browser setup, security or user ID roles] No special setup needed

NOTES and RESULTS:

		TEST SCRIPT STEPS/RESULTS			
STEP	**TEST STEP/INPUT**	**EXPECTED RESULTS**	**ACTUAL RESULTS**	**Requirements Validated**	**PASS/ FAIL**
Test the enemy spawners					
1	Start the game and have the player spawn onto allocated floor	Player should not fall through the floor.			
2.	Run the program	Enemies should spawn from left side of screen and move towards player			
3.	Let player run into enemies	Enemies should be destroyed on collision and damage character			

4.	Use Left mouse to Move player up and Down	Enemies should track player movement			
5.	Shoot enemies	Enemies should take damage and play audio. Enemies are destroyed upon impact			
Alternative Flow 1: If the player is dead, enemies should cease to spawn.					
6.					