University of York Department of Computer Science Engineering 1

Manual In-Person Testing

Cohort 3 Team 5 - alltheeb5t

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Functional Requirements

<u> Test 1 - Pass</u>

Requirement id - FR_BUILDING_TYPE

Description - Every building should have a single purpose such as teaching, food, etc.



All buildings have one single purpose.

Test 2 - Pass

Requirement id - FR_CONTROLS

Description - The system shall be operated by using a standard mouse and keyboard.



Here is a picture to prove that I can play this game with a keyboard and a mouse.

<u> Test 3 - Pass</u>

Requirement id - FR_SOUND

Description - The system should have a sound system integrated with the ability to change the sound files.



There is a sound system for the game, and also it's integrated with the ability to change the sound files but you will have to do that within the java code. Change the sound file in assets -> audio, change the background music file in there.

<u> Test 4 - Pass</u>

Requirement id - FR_MUTEABLE

Description - There should be a mute button so that the game can be played without any sound playing.



If you want to mute, simply slide the "Music Volume" or "Sound Volume" to the left when it reaches 0. This will allow you to play the game without any sound playing.

<u> Test 5 - Pass</u>

Requirement id - FR_SCALING

Description - The system shall be able to scale to small and large screens with low hardware requirements.



Using my MacBook from 2021, I can easily scale to small and large screens.

Also works with any PC on campus.

<u> Test 6 - Pass</u>

Requirement id - FR_TUTORIAL

Description - The system shall display a brief introduction of the game with controls to the user upon starting a new playthrough.



There is a "How To Play" button on the main menu. You will have to click on this button to let this window pop up. We decided not to show the brief introduction of the game

every time a user starts a new playthrough, as the user will have seen this message multiple times when playing the game again and again.

<u> Test 7 – Pass</u>

Requirement id - FR_LEADERBOARD

Description - The system shall have an option to display a leaderboard to see the 5 previous top scores.



Screenshot showing the leaderboard.

<u> Test 8 – Pass</u>

Requirement id - FR_EVENT_DISPLAY

Description - The system will display a brief description of the event that is currently occurring and the effect of it on satisfaction and finances.

		UniTycoon			
💃 100 🛛 😊 18%	£ -705	1 20 1	1	🔣 Timer: 04:36 Yeo	r 1. Semester 1
			02222222		
		t to start! eogenty await the event, and w fractiles will provide additional adva on increased chance to to CCOSE	N		
			•		

Some events will not display the effect on satisfaction and finances to make the game more interesting.

<u> Test 9 – Pass</u>

Requirement id - FR_EVENT_CHOICE

Description - For certain events the system will allow the user to choose between two options to affect their game.

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			Yo or Wir bui sat		_		

Screenshot shows that the user is able to choose from two options for this event.

<u> Test 10 – Pass</u>

Requirement id - FR_ACHIVEMENT_MENU

Description - The system shall have a menu that the player can view containing all possible achievements in game.

Title Description Bare Minimum Place exactly 1 of each building type.	Complete
Bare Minimum Place exactly 1 of each building type.	
Realistic Balance drops below 24000 in debt.	
Busy Campus Place more than 40 buildings,	
Clean Slate Place 10 or more buildings and remove them all.	
Indecisive Remove more than 20 buildings.	
s This A University Have twice as many recreation as study buildings after 20 buildings.	
Lucky Get 3 positive events in one game.	
Priorities Have twice as many study as recreation buildings after 20 buildings.	
Saviour Save a burning building.	
Unlucky Get 3 negative events in one game.	

Screenshot shows all achievements.

<u> Test 11 – Pass</u>

Requirement id - FR_END_SCREEN

Description - The system shall display the final satisfaction score to the player at the end of the game.

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★ 400 C 47% £ 202	i0k <u> </u>	Timer: 00:00 Year 4, Summer II
	You Lose! Final Satisfaction: 47 Achievements: - Saviour (+5% satisfaction Leaderboard Menu	n)

Screenshot showing the final satisfaction after the game.

<u> Test 12 – Pass</u>

Requirement id - FR_WIN

Description - The system shall show the player whether they have 'won' the game if their satisfaction is above 50% at the end of the game.



Screenshot showing the user they have won with a satisfaction higher than 50

Non - Functional Requirements

Test 13 - Pass

Requirement id - NFR_EASE_OF_USE

Description - The system shall be operable by A-level students with no training.

Megan's cousin who is doing A-level now has played this game fine with no training.

<u> Test 14- Pass</u>

Requirement id - NFR_SYSTEM_REQUIREMENTS (FR_SYSTEM_REQUIREMENTS)

Description - The system shall be usable on a big screen with a software lab pc (integrated intel graphics, w11 and 16gb of ram)



This game is run on a big screen with a software lab pc.

<u> Test 15- Pass</u>

Requirement id - NFR_BUTTONS** (FR_ACCESSIBILITY)

Description - Buttons must have clear descriptions and easy to understand functions.



Buttons are big and are easy to understand.

<mark>Test 16 - Fail</mark>

Requirement id - NFR_COLOUR

Description - The system shall use a colour scheme that wouldn't be confusing to colour blind people.

<u> Test 17 - Pass</u>

Requirement id -NFR_METRICS

Description - The system will update metrics such as student satisfaction and finances consistently.



As the game goes on, satisfaction and finances will consistently update.

<u> Test 18 - Pass</u>

Requirement id -NFR_FAST_PLACEMENT

Description - Placed buildings will appear instantly on the map.



Once a building is placed, it will appear instantly on the map showing that the building is being constructed.

Test Num	Pass / Fail	Outcome	Bugs Identified (If there is)
Test 1	Pass	All buildings have one single purpose.	N/A
Test 2	Pass	Game can be operated by using a standard mouse and keyboard.	N/A
Test 3	Pass	Can change sound file	N/A
Test 4	Pass	Game can play with muted music	N/A
Test 5	Pass	Able to scale to small and large screens with low hardware requirements.	N/A
Test 6	Pass	Has a brief introduction of the game	N/A
Test 7	Pass	Game will show leaderboard to see 5 previous top scores	N/A

Test Result Table

Test 8	Pass	System will display a brief description of the event that is currently occurring	N/A
Test 9	Pass	System allows the user to choose between two options to affect their game.	N/A
Test 10	Pass	System has a menu that the player can view containing all possible achievements in the game.	N/A
Test 11	Pass	System displays the final satisfaction score to the player at the end of the game.	N/A
Test 12	Pass	System shows the player whether they have 'won' the game if their satisfaction is above 50% at the end of the game.	N/A
Test 13	Pass	Megan's cousin who is doing A- level now has played this game fine with no training.	N/A
Test 14	Pass	Runs smoothly on campus PCs.	N/A
Test 15	Pass	Buttons are big and are easy to understand.	N/A
Test 16	Fail	Blue and green might not be friendly for some colour blind users.	Should have the option to change colour for colour blind users.

Test 17	Pass	As the game goes on, satisfaction and finances will consistently update.	N/A
Test 18	Pass	Placed buildings will appear instantly on the map.	N/A