

Stakeholders:

Direct stakeholder(s): Tommy Yuan, Daniel Bethell

Indirect stakeholder(s):

SSON:

The game will let you move around the university and simulate preparing for your avatars exams while making sure you don't run out of energy and scoring points to pass your exams.

Introduction:

As a group, we came up with our first few user requirements in the first two sessions before our customer discussion, using the Product Brief to come up with the more obvious requirements. Then in the next week we had our customer discussion with Tommy Yuan, where we had most of our questions answered, which we finished putting into our requirements traceability tables in the coming sessions, before having to trim them down to fit into the 3 page requirement. We mostly designed our presentation of the requirements from the examples shown in the powerpoints, but throughout the process we were using some other websites for help, some of which are shown below:

[Visual Resolutions: Requirements Specification Blog](#)

[Write a Software Requirement Document](#)

[How To Write a User Requirements Specification](#)

Requirements referencing system used:

FR = functional requirements

UR = user requirements

NFR = non functional user requirements

This ensures that anyone involved in the project can quickly reference a requirement making it easier and clearer in the project documentation.

User Requirements Table:

ID	Description	Priority
UR_RUNTIME	To have an average run time of around 5-10 minutes	Shall
UR_AVATAR	To be able to move the users avatar	Shall
UR_INTERACT	To interact with objects and locations on the world map	Shall
UR_ENERGY	To see the energy bar that is the condition of the player	Shall
UR_REST	To be able to go to at least one location in the game to rest to restore energy	Shall
UR_MAP	To have a map of the digital campus to move around in	Shall
UR_RECREATION	To be have at least 3 places to perform the recreational activity task at	Shall
UR_TUTORIAL	The user is taught the main gameplay loop quickly and efficiently	Shall
UR_STUDY	To be able to go to at least one location that allows the user to study and score points at least once per day.	Shall
UR_EAT	To be able to go to at least one location on the map that allows the user to eat.	Shall
UR_CRASHING	To not have the game to crash throughout any part of the gameplay	Shall
UR_DAYS	The game is split into 7 days that each end when the user has rested, the game will finish after the 7th day.	Shall
UR_GAME_END	Once game is finished user is given score on how well they performed	Shall
UR_SCORE_LEADERBOARD	To have a leaderboard that records current and best total scores	Should
UR_SOUND_EFFECTS	To have appropriate sound effects to add to the immersion of the game.	Should
UR_GRAPHICS	Have graphics that show core	should

	functionalities of the game and look nice	
UR_SCORE	A score counter that will decide if the user has passed their exams	Shall
UR_INTRO	User should be given a short intro for the context of the game to help immersion	Should
UR_SCALEABLE	To have the game scale to different screen resolutions	Shall
UR_CLOCK	Have a visible clock that shows the in-game time and a countdown of the days	May
UR_DAY_NIGHT_CYCLE	Have a visible day and night cycle throughout all days in the game	Shall
UR_ANIMATIONS	To have animations attached to each interactable object in the game	Should
UR_READABILITY	To make the game readable for people, taking into account factors like colorblindness	Should
UR_DIFFICULTY	To not have the game be too difficult to complete eg. be able to win at least twice	Shall
UR_DAILY_DIFFICULTY	To have the difficulty scale throughout the 7 days of gameplay	Should

Functional Requirements Table:

ID	Description	User Requirements
FR_WORLD_MAP	World map with icons of places and thing the user can interact with	UR_MAP
FR_ENERGY_BAR	An energy bar that changes depending on the state of the avatar	UR_ENERGY
FR_AVATAR	An avatar for the user to interact with the game through	UR_AVATAR
FR_INTERACTION	To be able to interact with the locations around the map	UR_INTERACT
FR_HIGHScore_TABLE	To have a table that saves the top scores recorded and displays them to the user	UR_SCORE_LEADERBOARD
FR_GAME_ENDING	To have an ending to the game which results in showing your score	UR_GAME_END

FR_EATING	To be able to do the eating activity when interacting with the appropriate location	UR_EAT
FR_RECREATION	To be able to do any recreation activity when interacting with the appropriate location	UR_RECREATION
FR_RESTING	To be able to do the rest activity when interacting with the appropriate location	UR_REST
FR_STUDYING	To be able to do the study activity when interacting with the appropriate location	UR_STUDY
FR_SOUND_EFFECTS	To play different sound effects for different actions taken by the user.	UR_SOUND_EFFECTS
FR_SCORE_COUNTER	Score counter is changed based on the action completed by the user and is updated during playthrough.	UR_SCORE

Non-Functional Requirements Table:

ID	Description	User Requirements	Fit Criteria
NFR_TIME	Game shouldn't be too long	UR_RUNTIME	Game should last between 5-10 minutes
NFR_UPTIME	The game should be available to play with minimal crashes	UR_CRASHING	Uptime: The game should not crash more than once during 3 playthroughs
NFR_SIMPLICITY	The game should be able to pick up the gameplay loop quickly	UR_TUTORIAL	Once the tutorial is done the user should understand the gameplay
NFR_FUN	The game should be enjoyable for the player		Case by case with interacting with testers
NFR_DIFFERENT_STUDY	Give the player more score for studying in multiple places over the various days.	UR_STUDY, UR_SCORE_COUNTER	Give the player 10% more score per different location studied at.
NFR_ENERGY_BAR	A representation of the amount of energy the player	UR_ENERGY_BAR	A bar that shows a % of the energy that the student has left.