Requirements

Cohort 1 Group 8

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User Requirements

ID	Description	Priority
UR_ACCESSIBILITY	The game must be aware of/be playable for those with disabilities, whether visual or cognitive. Hence it should not purely use colour as an identifier, or have text too small	Shall
UR_ACHIEVEMENTS	The player shall be able to gain achievements for hitting certain targets	Shall
UR_ACHIEVEMENTS_COUNT	The player should be able to get at least 3 achievements	Shall
UR_AUDIO	The game may have audio	May
UR_AVERAGE_SCORE	The player shall be able to achieve a score of 60-70 relatively easily, higher scores should be harder.	Shall
UR_CUSTOMISATION	There should be 2-3 options for different character appearances	Should
UR_DEVIATION	The game may deviate slightly from real life (but must still be grounded to reality). For example, new modules could be made up.	May
UR_EAT	The player should be able to eat, which should restore energy. But eating at irregular intervals will have negative effects.	Should
UR_EAT_LOCATIONS	The player should have at least one place to eat, but no more than three	Shall
UR_ENERGY	The player must have a set amount of energy per day.Activities should consume energy	Should
UR_GAME_DIFFICULTY	The game should be straightforward; anyone should be able to 'beat' the game, but very high scores should be hard to attain.	Should
UR_GAME_LENGTH	The game shall provide a short playtime of 5-10 mins.	Shall
UR_GAME_TONE	The game shall be light-hearted, positive with nothing extreme and appropriate for people between 16 and 20 The game may be realistic or humourous, with some jokes.	Shall
UR_HEALTH	The player shall not be able to die or anything too extreme.	Shall
UR_LOCATIONS	and at least one to study, one to eat, and three to do a recreational activity and no more than two study locations, three eating locations and six recreational locations	Shall

ID	Description	Priority
UR_MAP	The game will contain a map for the player to move upon	Shall
UR_MOVEMENT	The player should have direct control over the avatar with conventional movement controls.	Shall
UR_PLATFORM	The game should be playable on any relatively new desktop or laptop.	Should
UR_POV	The game may be top-down or side-on.	May
UR_RECREATION	The player can choose to perform recreational activities by interacting with them. This is important to do in order to succeed at the game, affecting the achieved score	Shall
UR_RECREATION_LOCATIONS	There should be at least 3 and no more than 6 locations to perform recreational activities	Shall
UR_RESOLUTION	The player shall be able to resize the screen.	Shall
UR_SCORE	The player must be able to perform activities to make their score better.	Shall
UR_SCORE_HIGHSCORE	The player shall be able to see their highest score.	Shall
UR_SCORE_LEADERBOARD	The player shall be presented with a leaderboard of the top ten people who have completed the game successfully	Shall
UR_SCREEN	The game should work maximized, with multiple options for screen sizes	Should
UR_SLEEP	The player must sleep everyday, it should also reset the energy bar and end the day, beginning the next	Shall
UR_SLEEP_LOCATIONS	There must be one location for the player to sleep	Shall
UR_STUDY	The player can choose to study. This should be done at least once a day to pass. Studying more will lead to a higher final grade	Shall
UR_STUDY_CATCHUP	If the player doesn't study on a day, they can catch up by studying more than once on another day, but this can only be done once per game	Should
UR_STUDY_LOCATIONS	There must be at least one, but no more than two places to study	Shall

ID	Description	Priority
UR_STUDY_OVERSTUDY	Overstudying will have negative repercussions	Should
UR_SYSTEM_REQUIRMENTS	The game shall be able to run on any computer with standard specs.	Shall
UR_TIME_CYCLE	The game must take place over a week with each day being 16 hours.	Shall
UR_TIME_PROGRESS	Performing a given activity should progress time forwards a given amount, depending on the activity	Shall
UR_UI	The player shall be shown a reasonable level of info about the game on the screen.	Shall

Constraint Requirements

- Greenfield Development to be completed by 21 March 2024
- Brownfield Development to be completed by 23 May 2024
- Shall run on standard desktop pcs and laptops and not need any advanced specs -
Game to be designed for 16 to 20 year-olds
- Game must be light-hearted
- Game is to show a student at university studying for exams
- Player is to sleep, eat, study and have recreation as part of the game

Functional Requirements

ID	Description	User requirements
FR_ACHIEVEMENTS_TRACK	The game should track statistics to reward player with achievements	UR_ACHIEVEMENTS
FR_ACHIEVEMENTS_SHOW	The game should present the user with the achievements they have gained	UR_ACHIEVEMENTS
FR_INTERACT	The player should be able to hit an interact button, left click, e or similar to interact with nearby objects	UR_ACTIVITIES

ID	Description	User requirements
FR_ACTIVITY_ENERGY_AL LOCATION	the game must allocate every activity a certain amount of energy to be used by the player	UR_ACTIVITIES
FR_SKINS	There should be multiple skins created for the user to choose from	UR_CUSTOMISATION
FR_CUSTOMISATION_MENU	The game should provide a menu in which the user can select the main character's appearance from multiple options, and this appearance is carried through the rest of the playthrough.	UR_CUSTOMISATION
FR_ACCESSIBILITY	The game must be aware of/be playable for those with disabilities. Hence it should not purely use colour as an identifier, or have text too small.	UR_DISABILITIES
FR_EAT	The game should allow the player to eat	UR_EAT
FR_EAT_LOCATIONS	The game should have at least one and no more than three locations to eat	UR_EAT
FR_ENERGY_INITIAL_AMMO UNT	the game must allocate the player an amount of energy per day	UR_ENERGY
FR_ENERGY_DRAIN	The game must drain energy from the player when completing an activity	UR_ENERGY
FR_ACTIVITY_LIMIT	The game should prevent the player from completing activities if out of energy or time in day	UR_ENERGY,UR_TIME_CYCL E

ID	Description	User requirements
FR_GRADING	The game shall have point requirements that will get you up to the next grade as the game progresses	UR_SCORE
FR_LEADERBOARD_TRACK	The game should track highscores to add to a locally stored leaderboard	UR_SCORE_LEADERBOARD
FR_LEADERBOARD_SHOW	The game should show the player the leaderboard at the end of the game or when prompted	UR_SCORE_LEADERBOARD
FR_PLAYER_COUNT	The game should be single-player	UR_MOVEMENT
FR_USER_MOVEMENT	the game shall facilitate the player to be able to move round the screen/the environment	UR_MOVEMENT
FR_RECREATION	The game must allow for the player to take part in recreation	UR_RECREATION
FR_RECREATION_LOCATIONS	The game must have at least three and no more than six recreational locations	UR_RECREATION
FR_SCORE	the game must have a number of points allocated for each activity	UR_SCORE
FR_TIME_CYCLE	The game should advance time when player sleeps	UR_SLEEP
FR_SLEEP	the game will have it so the player is able to sleep to finish a day	UR_SLEEP

ID	Description	User requirements
FR_ENERGY_REPLENISH	The game will replenish the player's energy on sleep	UR_SLEEP
FR_STUDY_EXCESS	Studying will lead to a better final score	UR_STUDY
FR_STUDY	the game must facilitate the player to study at least one time per day	UR_STUDY
FR_STUDY_CATCHUP	the game must facilitate the player to catch up on studying if they happen to miss a day	UR_STUDY_CATCHUP
FR_STUDY_LOCATIONS	The game must have in place at least one but no more than two places to study	UR_STUDY_LOCATIONS
FR_GAME_END	At the end of the seventh day, the game will end	UR_TIME_CYCLE
FR_TIME_CYCLE	When the player sleeps, the game must advance	UR_TIME_CYCLE
FR_INFO_PRESENTATION	the game shall present relevant information on the screen to the player	UR_UI

Non-Functional Requirements

ID	Description	User Requirements
NFR_GAME_LENGTH	the game itself will be a week worth of days and be finished by the player in a short play time of 5-10 minutes	UR_GAME_LENGTH
NFR_GAME_DIFFICULTY	the game shall be easily playable by players that have not played the game before but still rewarding those who are replaying.	UR_GAME_DIFFICULTY
NFR_SCREEN_SIZE	the game shall be able to tolerate differences in the sizes of computer screen	UR_SCREEN
NFR_LANGUAGE	All customer facing messages shall be in english	UR_UI
NFR_SETTING	The player controls a student in their final week before exams. The game's setting is a university campus / town	UR_GAME_TONE
NFR_TARGET_AUDIENCE	The target audience of the game will be students - those in university and finishing school	UR_GAME_TONE