Module: ENG1/ASSESSMENT1

Title: Requirements

Team name: ENG1_Boolean_BobCats

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Introduction

On this page we have outlined the user and system requirements for our Auber game. In order to elicit these requirements we carried out multiple customer meetings asking questions about the specific user requirements and also took thoughts from our flatmates who are close to the target audience as they are students at the university. For understanding and gathering accessibility requirements we used concepts and ideas from a mix of our HCI module and through the Engineering lectures. Taking inspiration from the requirements engineering lecture we decided to split the requirements into three tables: User Requirements, System Requirements (Non-Functional and Functional).

User requirements Table

ID	Description	Priority
UR_UNAVAILABLE_NETWORK	Users shall be able to use the system without a network.	Shall
UR_TELEPORT	The system shall teleport Auber to any other teleportation pad in the station.	Shall
UR_HEAL	Auber shall heal in the infirmary.	Shall
UR_GAME_WIN	Users shall arrest all eight infiltrators.	Shall
UR_GAME_LOST	The infiltrators shall destroy more than 15 systems of the space station.	Shall
UR_INFILTRATORS_ABILITY	Infiltrators shall have different special abilities.	Shall
UR_ARREST	The system shall teleport the infiltrator to brig.	Shall
UR_DESTROY	The system shall destroy the systems of the space station.	Shall
UR_UX	The system shall offer a pleasant user experience.	Shall
UR_REPORT	We shall provide enough documentation for another team to pick up our project.	Shall
UR_ACCESSIBILITY	The game will be accessible to as many of the target audience as possible.	Shall

UR_USABILITY	The game must be usable in the correct setting (open-day)	Shall
UR_ROOM_NUMBERS	There should be at least 4 types of rooms	Shall
UR_CHARACTERS	There are 8 hostiles and one player	Shall

Functional Requirements Table

ID	Description	User Requirements
FR_AUBER_POSITION	The system shall capture the position of a player.	UR_TELEPORT
FR_TELEPORTATION_PAD	The system shall know the positions of the teleportation pad.	UR_TELEPORT
FR_AUBER_MOVE	The system shall allow a player to move.	UR_TELEPORT
FR_HEALTH_OF_AUBER	The system shall set an amount of health for a player.	UR_HEAL
FR_HEAL	The player can teleport to the infirmary anytime.	UR_HEAL
FR_ARREST_NUMBER	The system shall record the number of infiltrators arrested.	UR_GAME_WIN
FR_DESTROY_NUMBER	The system shall record the number of destroyed systems.	UR_GAME_LOST
FR_INFILTRATOR_POSITION	The system shall capture the position of infiltrators.	UR_ARREST
FR_INFILTRATOR_MOVE	The system shall allow infiltrators to move.	UR_ARREST
FR_ARREST_COLLISION	The system shall detect a collision between an Auber and an infiltrator.	UR_ARREST
FR_TO_BRIG	The system shall allow the infiltrators to teleport to the brig.	UR_ARREST
FR_GOTHROUGH_DYNAMIC	The system shall prevent a dynamic object to go through a dynamic object	UR_ARREST
FR_DESTROY_COLLISION	The system shall detect a collision between an infiltrator and a system of the space station	UR_DESTROY

FR_SETTINGS	The user should be able to adjust settings such as sensitivity and controls.	UR_ACCESSIBILITY
FR_DEMO	There should be a demo mode where the game plays itself to show the user how the game works.	UR_UX
FR_INSTRUCTIONS	We will give instructions for playing the game using clear and simple language.	UR_ACCESSIBILITY

Non-Functional Requirements Table

ID	Description	User Requirements
NFR_SETUP	We will provide documentation for setting up our game (for groups to take up our project).	UR_REPORT
NFR_WEBSITE	We will create a website with details on NFR_SETUP and a link to our repository.	UR_REPORT
NFR_FEEDBACK	Any in game feedback will not rely solely on colour or sound.	UR_ACCESSIBILITY
NFR_SUPPORT	The game only needs support for Java as a standalone application	UR_USABILITY
NFR_SCREENSIZE	The game window must be malleable in size to allow for fullscreen mode and windowed mode.	UR_USABILITY
NFR_TIME	The game should only last 5-10 minutes to allow for many users to play the game in a shorter time.	UR_UX
NFR_OPERABILITY	The game only has one difficulty	UR_UX
NFR_LOAD	The player can load in a short time	UR_UX