ENG1 Requirements

Cohort 3 - Group 28

"Team 28"

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1) Requirements [20 marks]:
   a) Write a succinct introduction explaining how requirements were elicited and negotiated, and why they are presented as they are. Your submission should evidence research into requirements specification and presentation (4 marks, ≤ 1 page).
   b) Give a systematic and appropriately-formatted statement of user and system requirements (16 marks, ≤ 3 pages). Note that you will need a requirements referencing system, and may need to update this for subsequent assessment deliverables.

Requirements Elicitation and Negotiation

The requirements were initially elicited and negotiated with the use of the product brief. We did this by identifying the key requirements specified within the product brief in order to give us a foundation to work with. We discussed that we would first make it clear what the main functionalities the game should have and then start adding unique features according to our clients needs in order to make the game specific to us.

We looked into requirements elicitation and presentation techniques in more detail to make sure the requirements specification was accurate and comprehensive. To collect and refine the requirements, we used methods like brainstorming sessions, stakeholder interviews, prototyping, and observations . Through active engagement with stakeholders, such as subject matter experts and potential users, we were able to obtain important insights about their goals, needs, and preferences.

We also realised how crucial it was to negotiate needs and set priorities in order to meet stakeholder expectations and project limits. We repeatedly assessed and improved the criteria through constant communication and cooperation, making the required modifications to account for shifting priorities and conditions. We were able to retain our adaptability and flexibility while making sure the end product achieved the intended goals thanks to this iterative process.

Overall, guidelines in the product brief were used to guide the requirements elicitation and negotiation, with an emphasis on stakeholder engagement, communication, and teamwork. We sought to guarantee that the finished product satisfies the requirements and expectations of all stakeholders while abiding by project limitations and providing value to the end users.

Requirements Statement

System-wide Constraints

- Java …
- Appropriately-licensed 3rd-party libraries, tools, and assets
- Accommodate stakeholder
- Meet the demands of shareholders and stakeholders
- Usable on all reasonable user devices (Desktop only)
- £0 Budget

User Requirements

ID	Description	Priority
UR_GAME_AVATAR	The player will control an avatar representing a second-year computer science student. The avatar can move around the map and interact with various objects.	Shall
UR_GAME_DURATION	The game will last for 7 days, with each day ending when the player goes to sleep. The game ends after the 7th day.	Shall
UR_MAP	The game must contain a map for the avatar to move around in. This map should contain at least some of the Heslington East campus buildings.	Shall
UR_COLLISION	The avatar should be restricted from certain areas, such as going off screen.	Should
UR_ACTIVITY_TRACKER	a tracker for the 7 days the game lasts, with a mechanism to move to the next day.	Shall
UR_ACTIVITY_COUNTER	a simple counter denoting how many of each activity has been performed so far.	Shall
UR_AVATAR_RECOGNISE	The player should always be able to identify where their avatar is on screen.	Should?
UR_STUDY_AREA	The game must contain at least one place to study (maximum 2 places)	Shall
UR_SLEEP_AREA		Shall
UR_EAT_AREA		Shall

ID	Description	Priority
UR_RECREATIONAL_AREA		Shall
UR_RESOURCE_CONSUMPTION		Shall
UR_EXAM	?? ask the customer - (The primary objective of the game is to ensure the avatar has studied enough for exams, taken some time for themselves, and had enough rest every day.)	Shall

System Requirements, Functional

ID	Description	User Requirements

System Requirements, Non-functional

ID	Description	User Requirements	Fit Criteria

Textual Use Case Template

- **Name**: < an active verb phrase, describing the goal >
- **Actors**
  - Primary Actor: < the actor with the goal >
  - Supporting Actors: < other actors involved in the interaction >
- **Precondition**: < required state of world prior to use case >
- **Trigger**: < what starts the use case, e.g., primary actor, internal event, … >
- **Main Success Scenario**: < steps >
- **Secondary scenarios**: < steps, postcondition >
- **Success Postcondition**: < holds for successful exit, achieves goal >
- **Minimal Postcondition**: < holds for all exits, protects stakeholder interests >

- **Name:** User
- **Precondition:** User downloads the game/loads in web browser
- **Trigger:** User begins playing the game
- **Main Success Scenario:**
  - 1. User progresses through the game
  - 2. Completes activities and tasks
  - 3. Levels up and grows their attributes
  - 4. Passes the exam
- **Secondary scenarios:**
  - 1.1. User does not find the game enjoyable and gives up
  - 1.2 User fails the exam
  - 2.1 User fails to complete the tasks, potentially too difficult
  - 4.1 Fails the exam
- **Success Postcondition:**
  - User replays the game after finishing on a possible high difficulty?
- **Minimal Postcondition**
  - User finishes the game or doesn't finish and doesn't replay.

Questions for stakeholder

1. Specific platform? Desktop only?
2. Give SSON pls
3. Requirements and Architecture for whole assessment or just assessment 1?
4. Game replayability? Should users be encouraged to replay for high scores/achievements?
5. Difficulty of the game? Different modes e.g Easy, Normal, Hard, Hardcore?
6. Whats most important graphics/gameplay?
7. Should the game have additional gameplay for entertainment that doesn't directly impact the main 'story' for example having other minigames/sidequests?
8. Game file size limitations? (i.e. any hardware limitations?)
9. Size of map preference?
10. License - our discretion?
11. Money in-game?
12. NPCs?
13.