ENG1 Group 9 User Requirements

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PART A

In order to elicit our requirements, we conducted numerous methods of collection. One such method was the research of different requirement types and the tailoring of the examples given to our own needs. There were also requirements outlined in the initial brief handout given to us, which also helped figure out further requirements upon closer study of said brief. We also used past experience to research similar games to the one described by the brief, such as *Overcooked*, to find requirements applicable to those games that were also applicable to ours.

A customer meeting held on 22nd November at 16:30pm with Antonio Garcia-Dominguez allowed us to negotiate the boundaries of certain requirements and also to refine certain vague requirements. We were also able to ask about accessibility features and refine the non-functional requirements for them, along with outlining the constraints and their limits.

Requirements were a significant topic of discussion before proceeding with the development of our project "Piazza Panic" due to their importance in the software engineering cycle. They were rigorously tested against what was found in our research and then discussed again to determine the suitability of the requirements for the project.

PART B

User Requirements

| ID | Description | Priority |
|-----------------|--|----------|
| UR_UX | The game should be visually enticing and be representative of a kitchen environment. | Should |
| UR_FINISH_LEVEL | The user will be able to finish a level after a given amount of time. | Shall |
| UR_INTUITIVE | The controls/actions should feel natural to the user. | Should |
| UR_CHEF | There is a chef that can be controlled by the user. | Shall |
| UR_PROGRESSION | There should be an indicator of how far through an action a player is. | Should |
| UR_CUSTOMER | There shall be customers at the restaurant. | Shall |
| UR_ALERT_USER | When a new event occurs or an action is complete it should be clear to the user. | Should |
| UR_ACCESSIBLE | The game shall tailor to all types of users. | Shall |
| UR_UI | There shall be a user interface. | Shall |

Functional Requirements

| ID | Description | User Requirements |
|--------------------------------|--|-------------------|
| FR_CHANGE_LEVEL_DI FFICULTY | The user should be able to select between multiple levels of difficulty prior to starting a game | UR_UX |
| FR_QUIT_LEVEL | The user shall be able to pause and quit the level. | UR_FINISH_LEVEL |
| FR_GRAB_ITEM | The chef can pick up items in the kitchen. | UR_CHEF |
| FR_PLACE_ITEM | The chef can place items in the kitchen. | UR_CHEF |

| FR_MOVE_CHEF | The chef can walk around the kitchen. | UR_CHEF |
|-------------------|---|-------------------------|
| FR_CHOP_ITEM | The chef can chop an item. | UR_CHEF |
| FR_COOK_ITEM | The chef can cook an item. | UR_CHEF |
| FR_DISPOSE_ITEM | The chef can put an item in the bin. | UR_CHEF |
| FR_NEW_CUSTOMER | A customer can arrive at the restaurant and order one item. | UR_CUSTOMER |
| FR_SERVE_CUSTOMER | The chef can serve a complete meal to a customer. | UR_CHEF, UR_CUSTOMER |
| FR_PAUSE | The user can pause the game midway through and access a menu. | UR_UI |

Non-Functional Requirements

| ID | Description | User Requirement | Fit Criteria |
|-------------------------------|---|------------------|---|
| NFR_DISTINGUISHA BLE | Each item and chef will be distinguishable from each other in a way other than just colour. | UR_ACCESSIBLE | All colour-blind users can play the game. |
| NFR_CUSTOMISABL E_CONTROLS | The controls can be rebound. | UR_ACCESSIBILE | Users with disabilities can fit the controls to their requirements. |
| NFR_MUTE_GAME_ AUDIO | The user can mute the game audio if desired. | UR_ACCESSIBLE | Users hard of hearing or with sensitive hearing can still enjoy the game. |