Blackbox Testing

| Requirement ID | Description of Requirement | Description of Test / JUnit Test Name | Expected Result | Result |
|---------------------|--|--|-----------------|--------|
| UR_Timer | The user should be given a visual time representation relating to the singular task or order they are completing. | Tested in both scenario mode and endless mode. Timer can be seen working correctly in the top left hand corner. Also tested against stopwatch to check accuracy and is spot on. | PASS | PASS |
| UR_Gameplay | The user should be able to play the game as intended | Gameplay tested in scenario mode and endless mode from start to end. Works as intended. | PASS | PASS |
| UR_UX | The system will offer clean graphics, showing clearly what each station is, along with clearly labelled menus and buttons. | Tested through gameplay. Menu can be seen clearly showing different game mode options. Graphics are well created allowing users to understand what each station and the different ingredients are meant to be. | PASS | PASS |
| UR_UX | The system will offer a fully interactable and satisfactory UI for the user to control the game state, (loading into and out of the game, selecting menu buttons). | The UI is perfectly interactable however, when full screened at the start the buttons cannot be interacted with. | FAIL | FAIL |
| UR_Gamemodes | The user will be able to choose between two game modes; Scenario and Endless | Tested by selecting each gamemode in the menu screen. Endless mode options (easy, medium, hard) work as intended. As well as scenario mode. | PASS | PASS |
| UR_Customer_Counter | There will be a counter where customers will visibly give their orders and then collect them from the user within a given time frame | Tested through gameplay in both scenario and endless mode. Works as intended. | PASS | PASS |

| UR_Customer_Aug | The user will be able to change the number of customers that arrive (default to 5) | Tested for scenario mode. In the menu screen set the number of customers to 1,2,3 and 4. All working as planned. Game ends automatically after the last customer leaves. | PASS | PASS |
|-----------------|--|--|------|------|
| UR_Loss | The user will lose the game if all reputation points are lost | Tested in endless mode by inactivity until all user reputation points are lost. Each customer that is not served causes a reputation point to be lost. Works as intended. | PASS | PASS |
| UR_Win | The user will win if they serve all customers without losing their reputation points | Tested in scenario mode by playing the game to completion. Players would win if all customers are served without losing all reputation points. | PASS | PASS |
| UR_Endless | The user will be able to choose to play an endless mode where customers will keep arriving until they lose | Option for endless mode is visible on the menu screen. Tested in all difficulty levels, through completing a few orders and then staying inactive. Customers are seen arriving after each dish is completed until the user loses from the loss of all reputation points. | PASS | PASS |
| FR_Power_Ups | The user will be able to acquire some five special powers | This was tested by playing the game. All 5 power-ups can be obtainable. All 5 power-ups work as intended. | PASS | PASS |
| UR_Save | The user can save the game | Save game feature works correctly. Tested in endless mode by completing a few orders then saving and being able to come back to where it was left off. | PASS | PASS |
| FR_End | The system will recognise when the | Tested through gameplay in both | PASS | PASS |

| | player has lost/won the game and terminated the session | scenario and endless mode. After serving all customers, the system shows the player their results and then terminates the session. | | |
|------------|---|---|------|------|
| FR_Alert | The system will notify the user when something has happened (Eg. reputation lost, chef change) | Tested through gameplay. No alert was seen when a reputation point is lost. No alert was seen for chef changes etc. | FAIL | FAIL |
| FR_Recipes | The system will provide the user several recipes | Recipes can be seen in the centre of the map. Users can follow the instructions for each item. Works as intended. | PASS | PASS |

Whitebox Testing

| UR_Chef_Swap | The user will be allowed to swap between chefs, even whilst one is completing a task. | Chef_SwapTest | PASS | PASS |
|------------------|---|----------------------|------|------|
| UR_Chef_Move | The user can move the chefs freely around the kitchen | PlayerTest | PASS | PASS |
| UR_Chef_Interact | The chefs will be able to interact with any object in front of them (e.g. – Chopping board) | Chef_InteractionTest | PASS | PASS |
| UR_Reputation | The user will be able to lose reputation points if customers are not served | LoseRepTest | PASS | PASS |
| UR_Recipe | The user will make different recipes, requiring interaction with different stations | RecipeTest | PASS | PASS |
| UR_Investment | Users will be able to invest their earnings to unlock more chefs and stations | InvestmentTest | PASS | PASS |
| UR_Burning | The user will be able to burn the food if it | BurnTest | PASS | PASS |

| | was left to cook for too long | | | |
|---------------------|--|----------------------|------|------|
| FR_Controls | There will be a simple control scheme in place for the user to move the chef. The control scheme will include an interact button and a button that will cycle through the controllable chefs. | PlayerTest | PASS | PASS |
| FR_Collision | The chefs will collide with the and not be able to move closer when in a certain range of an object | CollisionTest | PASS | PASS |
| FR_Interact | When the chef is within the set range of a station or object, such as the counter, they will be able to use the interact key to use said station or object. | Chef_InteractionTest | PASS | PASS |
| FR_Invalid_Interact | If the chef does not have the required ingredients for the station they intend to use they will not be able to interact with the station. | Chef_InteractionTest | PASS | PASS |
| FR_Reputation | The user will start with 3 reputation points, if they fail to complete an order in the time given they lose a point. | LoseRepTest | PASS | PASS |

Non-Functional Requirement Testing

| Requirement ID | Description of Requirement | Linked Requirement (therefore tested) | Expected Result | Result |
|------------------------|---|---|-----------------|--------|
| NFR_reliable_gam eplay | The game should rarely crash. This should have no permanent effect on the game's operation | All UR | PASS | PASS |
| NFR_bugfixing | Any game breaking bugs will be fixed and updated | All UR | PASS | PASS |
| NFR_loadtime | The game should load within a reasonable time frame | All UR | PASS | PASS |
| NFR_lag | The game's lag should be non-existent or at least not noticeable. | All UR | PASS | PASS |
| NFR_instruction_s et | The game will include an easily understandable description of the aim of the game and how to operate it | UR_UX | PASS | PASS |
| NFR_save_corrupt ion | If a save file becomes corrupted, the other files and the game itself will not be affected | UR_Save | PASS | PASS |
| NFR_control_set | The game will use simple controls which can be understood by anyone who can use a mouse and keyboard | UR_UX UR_CHEF_MOV E | PASS | PASS |
| NFR_tutorial | The game will | UR_UX | PASS | PASS |

| | contain a tutorial and a reminder screen of the controls | | | |
|------------------------------------|--|----------------------------------|------|------|
| NFR_options | The hotkeys will be changeable to make the game easier to use | UR_UX | PASS | PASS |
| NFR_map_design | Map design will include high contrast and clearly distinguishable designs for interactable objects to make it easy to navigate | UR_UX UR_Customer_ Counter | PASS | PASS |
| NFR_audio_visual _compatibility | Any audio cues will also have a visual cue | UR_UX | N/A | N/A |
| NFR_visual_focus | Pictures will be used to represent things instead of words as much as possible | UR_UX | PASS | PASS |
| NFR_standard_co ntrols | Hotkeys and controls will be similar to /the same as other controls for similar games to match the standard | UR_UX UR_Gameplay | PASS | PASS |