



# Documentation of Manual Testing:


Identifier	TEST_UR_SWITCHING_COOKS (2.1)
Short Description	This test will check whether we are able to switch cooks with the number keys 1,2,3.
Related Requirement(s)	UR_SWITCHING_COOKS, FR_DIFFERENT_COOKS, FR_CURRENT_COOKS, FR_SWITCH_COOKS
Author	Muaz
Steps	<p>FR_DIFFERENT_COOKS: See if the system can differentiate between different cooks. Take cook number 1 and move to pantry. Take cook 2 and move to cutting station. Switch back to cook 1 and try opening the pantry.</p> <p>FR_CURRENT_COOKS: See if the selected cook has the blue cursor above them. Switch to cook 2 and check if the cursor moves.</p> <p>FR_SWITCH_COOKS: After starting the game, click on 2 to switch to second cook. Then click on 3 to switch to 3rd cook. Then click back on 1 to switch back to the first cook.</p>
Expected Outcome	<p>FR_DIFFERENT_COOKS: The pantry should open and any ingredients added should go to cook 1.</p> <p>FR_CURRENT_COOKS: The blue cursor should be present above cook 1 at the start. It should then move to cook 2 once you switch cooks.</p> <p>FR_SWITCH_COOKS: The cooks should switch upon the press of the number keys and you should be able to complete different tasks and have your own stack for each different cook.</p>
Actual Outcome	As above
Failure/Edge Cases	<p>Checked whether other keys would make cooks change - they do not</p> <p>Checked whether clicking on the actual cook would make them change - it does not</p>
Status (Pass/Fail)	PASS, PASS, PASS
Pictures	 <p>Picture before and after clicking on key for number 3.</p>
Notes	We tried these in both endless mode and scenario mode and for all difficulties, just to make sure that our test results were reproducible across all modes (this was the case for all tests).

Identifier	TEST_UR_MOVING_COOKS (2.2)
Short Description	This test will check whether we are able to move cooks to the different stations, pantry and bin
Related Requirement(s)	FR_MOVE_COOK, FR_DESTINATIONS, FR_MOVING_ROUTES, FR_MOVING_GRAPHICS, FR_COOK_COLLISIONS
Author	Muaz
Steps	FR_MOVE_COOK: After starting the game, click on the frying station, followed by the baking


	<p>station, following by the serving station, followed by the cutting station, followed by the bin, followed by the pantry.</p> <p>FR_DESTINATIONS: Try moving to places which are not stations. Try moving to all the stations again.</p> <p>FR_MOVING_ROUTES: Try moving between different stations. Verify if the route taken is the same every time.</p> <p>FR_MOVING_GRAPHICS: Move the cook between different stations and check whether there are moving graphics and animations for the cook.</p> <p>FR_COOK_COLLISIONS: Move two cooks to the same station and check whether they collide or whether they are able to both be at the same station.</p>
Expected Outcome	<p>FR_MOVE_COOK: The cook should move to the stations in that order.</p> <p>FR_DESTINATIONS: The cook should only move if you move to a valid station.</p> <p>FR_MOVING_ROUTES: The routes should be consistent.</p> <p>FR_MOVING_GRAPHICS: There should be moving graphics for the cook.</p> <p>FR_COOK_COLLISIONS: Two or more cooks should be able to exist at the same station.</p>
Actual Outcome	<p>FR_MOVE_COOK, FR_DESTINATIONS, FR_MOVING_ROUTES: As above</p> <p>FR_MOVING_GRAPHICS: Due to time constraints, there were no moving graphics implemented.</p> <p>FR_COOK_COLLISIONS: Although two cooks can exist at the same station, 3 cannot.</p>
Failure/Edge Cases	<p>Checked to see whether cook would move to locations which were not stations, by clicking on parts of the screen which were not stations - they do not</p> <p>Tried moving cooks with arrow keys - they do not</p> <p>Check if two cooks can be at the same station - they can but not 3</p>
Status (Pass/Fail)	PASS,PASS,PASS,FAIL,FAIL
Pictures	<p>Picture before and after clicking on the frying station / two cooks at the same station</p> 
Notes	<p>Previously we had the error that the selected cook could not move anywhere where there was already a cook present. However, this was amended and now multiple cooks can be at the same station</p>

Identifier	TEST_UR_COOK_ACTION (2.3)
Short Description	This test will check whether the cooks are able to interact with the different stations to run tasks
Related Requirement(s)	UR_COOK_ACTION, FR_USE_STATION, FR_DROP_RESTRICTION,


	FR_TAKE_PREPPED_INGREDIENT, FR_COOK_RESTRICTIONS, FR_VIEW_PANTRY, FR_EXIT_PANTRY, FR_SERVING_STATION, FR_EXIT_SERVING_STATION, FR_SERVE_DISH, FR_INCOMPLETE_DISH, FR_BIN
Author	Muaz
Steps	<p>FR_USE_STATION: Take a lettuce from the pantry, go to the cutting station and click on the station.</p> <p>FR_DROP_RESTRICTION: Take a lettuce from the pantry, go to the frying station and click on the station.</p> <p>FR_TAKE_PREPPED_INGREDIENT: Take a lettuce from the pantry, go to the cutting station, click on the station and see once prepared if the lettuce adds to the cook stack.</p> <p>FR_COOK_RESTRICTIONS: Take a lettuce from the pantry, go to the cutting station, click on the station. If the progress bar appears, then click on the frying station to see if the cook moves away.</p> <p>FR_VIEW_PANTRY: Go to the pantry and click on it. See if the window with pantry ingredients opens up. See if the cook stack and orders are still visible. See if there is a bin icon which removes the top item from stack. Click on the bin icon to test it.</p> <p>FR_EXIT_PANTRY: Click on the cross button after loading into the pantry.</p> <p>FR_SERVING_STATION: Go to the serving station and click on it. See if the window with the menu and dishes pops up.</p> <p>FR_EXIT_SERVING_STATION: Click on the cross button after loading into the serving screen.</p> <p>FR_SERVE_DISH: Make an order correctly and try serving it to the customer.</p> <p>FR_INCOMPLETE_DISH: Make an order incorrectly (miss 1 ingredient). Try serving to the customer.</p> <p>FR_BIN: Go to the bin and click on the bin.</p>
Expected Outcome	<p>FR_USE_STATION: If the item belongs to that station, it should start preparing.</p> <p>FR_DROP_RESTRICTION: The item should not drop and thus should not start preparing.</p> <p>FR_TAKE_PREPPED_INGREDIENT: The item should be added to the stack.</p> <p>FR_COOK_RESTRICTIONS: The cook should not move whilst the preparation step is under way.</p> <p>FR_VIEW_PANTRY: Should be able to see the window with ingredients. Should be able to see orders at the top and stack on the right. Bin icon should allow you bin top item in a stack.</p> <p>FR_EXIT_PANTRY: Should exit the pantry.</p> <p>FR_SERVING_STATION: Should be able to see the window with menu and dishes.</p> <p>FR_EXIT_SERVING_STATION: Should exit the serving station.</p> <p>FR_SERVE_DISH: The dish should be served. The prepared ingredients should vanish from the cook stack and the customer should leave.</p> <p>FR_INCOMPLETE_DISH: The customer should not accept the dish and the user should receive an alert about what ingredients he is missing.</p>


	FR_BIN: The bin, once clicked, should remove the top ingredient from the stack.
Actual Outcome	FR_USE_STATION, FR_DROP_RESTRICTION, FR_COOK_RESTRICTIONS, FR_EXIT_PANTRY, FR_SERVING_STATION, FR_EXIT_SERVING_STATION, FR_SERVE_DISH, FR_BIN: As above  FR_TAKE_PREPPED_INGREDIENT: As above, but there is no specific button to add the prepped ingredient to your stack. It is added automatically.  FR_VIEW_PANTRY: As above, but there is no bin icon to get rid of the top item on the pantry window.  FR_INCOMPLETE_DISH: As above, but does not tell you which ingredients are missing, in the case of an incomplete dish.
Failure/Edge Cases	Tried treating up every ingredient where it didn't belong e.g. trying to cut up a patty, frying a potato to see whether the ingredients would still be prepared - they were not Checked whether the cook could move away from the station whilst he was preparing the ingredient. He cannot, therefore, the test was successful.
Status (Pass/Fail)	PASS, PASS, FAIL, PASS, FAIL, PASS, PASS, PASS, PASS, FAIL, PASS
Pictures	Picture of progress bar whilst lettuce is being cut up. Picture of burnt patty. Pictures of serving screen and pantry windows.  
Notes	The dishes on the serving screen are greyed out due to a later functionality of unlocking recipes.


Identifier	TEST_UR_STATION_ACTION (2.4)
Short Description	This test will check whether the stations function properly.
Related Requirement(s)	UR_STATION_ACTION, FR_STATION_ACTION, FR_ACTION_TIME_LIMIT, FR_PREP_FAIL, FR_AVOID_RESET
Author	Muaz
Steps	FR_STATION_ACTION: Start the game and get a patty. After cooking one side at the frying station, see if there is a button signifying a cooking action is required. After clicking, check to see if the progress bar appears.  FR_ACTION_TIME_LIMIT: Start the game and see if there is a time limit for the user to click on the FLIP button after getting the patty.  FR_PREP_FAIL: Get a patty and do not click on the FLIP button when prompted. See if it burns.  FR_AVOID_RESET: Move to the pantry screen and then exit the window. See if the location of any assets has changed.
Expected Outcome	FR_STATION_ACTION: There should be a FLIP button present and a progress bar should appear


	<p>after clicking on the FLIP button.</p> <p>FR_ACTION_TIME_LIMIT: There should be a time limit visible for how long you have to click on the button.</p> <p>FR_PREP_FAIL: The patty should burn and it should no longer function as a patty i.e. you cannot serve it.</p> <p>FR_AVOID_RESET: The asset locations should remain unchanged.</p>
Actual Outcome	As above
Failure/Edge Cases	We tried seeing if the burnt patty would still work as a cooked patty. However, we were unable to serve the burger, therefore this was not a problem.
Status (Pass/Fail)	PASS, PASS, PASS, PASS
Pictures	<p>The burnt patty and the flip button.</p> 
Notes	Although there is no visible countdown timer to click on the FLIP button, logically there is one.


Identifier	TEST_UR_COOK_STACK (2.5)
Short Description	This test will check the functionalities of the cook stacks.
Related Requirement(s)	UR_COOK_STACK, FR_COOK_STACK, FR_ADD_TO_STACK, FR_STACK_LIMIT
Author	Muaz
Steps	<p>FR_COOK_STACK: Switch between the cooks. Check each stack is different. Check the stacks save when you leave and then revisit them.</p> <p>FR_ADD_TO_STACK: Add an item from the pantry into the stack. Check it is added.</p> <p>FR_STACK_LIMIT: Try adding more than 5 items in the stack.</p>
Expected Outcome	<p>FR_COOK_STACK: Every cook should have their own stack. Stacks should save.</p> <p>FR_ADD_TO_STACK: The item should be added to the stack. The most recent item should be on the top.</p> <p>FR_STACK_LIMIT: The stack should not allow more than 5 items on the stack.</p>
Actual Outcome	As above
Failure/Edge Cases	Tried seeing whether the stacks save, which they do.
Status (Pass/Fail)	PASS, PASS, PASS

<p>Pictures</p>	<p>Inventory before and after cutting of lettuce. Max stack Different stacks for different cooks</p> 
<p>Notes</p>	<p>Tried with all ingredients as well as the burnt patty</p>

<p>Identifier</p>	<p>TEST_UR_CUSTOMER_VIEW (2.6)</p>
<p>Short Description</p>	<p>This test will check for the visibility and functionality of customer sprites and orders.</p>
<p>Related Requirement(s)</p>	<p>UR_CUSTOMER_VIEW, FR_CUSTOMER_SPRITES, FR_ORDER_TICKET</p>
<p>Author</p>	<p>Muaz</p>
<p>Steps</p>	<p>FR_CUSTOMER_SPRITES: Run the game and check the customer sprites. FR_ORDER_TICKET: Run the game and check for orders.</p>
<p>Expected Outcome</p>	<p>FR_CUSTOMER_SPRITES: There should be sprites for each customer. There should be multiple different sprites. FR_ORDER_TICKET: The orders should be visible at the top of the screen, along with the corresponding recipes.</p>
<p>Actual Outcome</p>	<p>As above</p>
<p>Failure/Edge Cases</p>	
<p>Status (Pass/Fail)</p>	<p>PASS, PASS</p>
<p>Pictures</p>	
<p>Notes</p>	


Identifier	TEST_UR_TIME_CUSTOMERS (2.7)
Short Description	This test will check for the time for the customer
Related Requirement(s)	UR_TIME_CUSTOMERS, FR_ORDER_TIME_LIMIT
Author	Muaz
Steps	FR_ORDER_TIME_LIMIT: Check to see if there is a progress bar at the bottom of every ticket.
Expected Outcome	FR_ORDER_TIME_LIMIT: There should be a progress bar, showing how much time the user have left to serve the customer.
Actual Outcome	FR_ORDER_TIME_LIMIT: There is no progress bar. Rather there is a countdown.
Failure/Edge Cases	
Status (Pass/Fail)	FAIL
Pictures	
Notes	Although the progress bar was not implemented, the countdown timer is an alternative method of fulfilling the requirement.


Identifier	TEST_UR_REPUTATION (2.8)
Short Description	This test will check whether there are reputation points, and if they are clearly displayed.
Related Requirement(s)	UR_REPUTATION, FR_REP_DISPLAY, FR_REP_LOSS
Author	Muaz
Steps	FR_REP_DISPLAY: Start the game and see if the reputation points are shown graphically. FR_REP_LOSS: Do not serve a customer in time.
Expected Outcome	FR_REP_DISPLAY: There should be reputation points clearly visible at the top. FR_REP_LOSS: You should lose a reputation point.
Actual Outcome	As above
Failure/Edge Cases	Extra test to see if the reputation points can increase as well (due to powerup). If you run out of reputation points, the game should end, which it does.
Status (Pass/Fail)	PASS, PASS
Pictures	Reputation points at start (3), then after losing one due to running out of time (2) and then gaining one back from powerup (3) 
Notes	The powerup to gain a reputation point back spawns randomly.

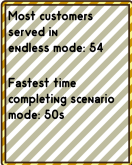
Identifier	TEST_UR_EARNINGS (2.9)
Short Description	This test will check whether there is the functionality to make earnings. The earnings should be able to be used.
Related Requirement(s)	UR_EARNINGS, FR_SCENARIO_MODE_EARNINGS, FR_ENDLESS_MODE_EARNINGS, FR_SPEND_EARNINGS
Author	Muaz
Steps	<p>FR_SCENARIO_MODE_EARNINGS: Load into scenario mode. Complete enough salad order to unlock the pizza. Note down the earnings per salad served (without powerup). Note down the earnings per pizza earned.</p> <p>FR_ENDLESS_MODE_EARNINGS: Load into endless mode. Serve customers. Note down the earnings per customer.</p> <p>FR_SPEND_EARNINGS: After serving salad, see if you can unlock any other recipes.</p>
Expected Outcome	<p>FR_SCENARIO_MODE_EARNINGS: Pizza should earn you more coins than salad.</p> <p>FR_ENDLESS_MODE_EARNINGS: Earnings should remain constant.</p> <p>FR_SPEND_EARNINGS: You should be able to unlock other recipes after having enough coins.</p>
Actual Outcome	<p>FR_ENDLESS_MODE_EARNINGS, FR_SPEND_EARNINGS: as above</p> <p>FR_SCENARIO_MODE_EARNINGS: The earnings are constant per customer and not based on difficulty.</p>
Failure/Edge Cases	We saw if the earnings would increase if no customer was served. Also checked to see that if we do not serve a customer do the earnings go down. Both were false, so our test was successful. Checked to see if the decrease in earnings after buying a recipe is just visual - it is not, it is also logical, as you then need to earn more money to get more recipes.
Status (Pass/Fail)	PASS
Pictures	Earnings before and after serving a customer 
Notes	In our functionality, we have unlocked recipes as opposed to unlocking stations. However, both work towards the same thing.

Identifier	TEST_UR_MAX_SERVE (2.10)
Short Description	This test will check whether the user is able to see the maximum number of customers they served in endless mode
Related Requirement(s)	UR_MAX_SERVE, FR_CUSTOMERS_SERVED
Author	Muaz




Steps	Start the game, load into endless mode and play. Upon losing all your reputation points, check if the game shows you how many customers you served.
Expected Outcome	Number of customers served should be present on the game over screen.
Actual Outcome	As above
Failure/Edge Cases	Tried with 0 customers and tried with a singular customer and tried with multiple customers.
Status (Pass/Fail)	PASS
Pictures	This is the full game over screen. 
Notes	Tried with all difficulties. Checked to see if the ending screen was the same for scenario mode - it was not (does not show number of customers served).


Identifier	TEST_UR_SCENARIO_TIME (2.11)
Short Description	This test will check whether the user is able to see how long it took them to finish the scenario
Related Requirement(s)	UR_SCENARIO_TIME, FR_SCENARIO_TIME
Author	Muaz
Steps	Start the game, load into scenario mode and finish the scenario. See if the time taken to finish the scenario is displayed.
Expected Outcome	Time is displayed
Actual Outcome	As above
Failure/Edge Cases	Tried with both scenario mode and endless mode - although not a necessity, the time also shows in endless mode, but it is how long you survived for.
Status (Pass/Fail)	PASS
Pictures	This is the full game over screen. 
Notes	

Identifier	TEST_UR_USER_EXPERIENCE (2.12)
Short Description	This test will check for ease of navigation for the game and easy information access.
Related Requirement(s)	UR_USER_EXPERIENCE, FR_GAME_OVER, FR_LEADERBOARD, FR_MAIN_MENU, FR_SFX
Author	Muaz
Steps	FR_GAME_OVER: After finishing the game, observe what is on the game over screen, if any.  FR_LEADERBOARD: Navigate to the leaderboard and see if it has the top 10 scores.  FR_MAIN_MENU: Navigate to the menu, check if it has buttons for scenario mode and endless mode.  FR_SFX: Check if there are background sound effects and music.
Expected Outcome	FR_GAME_OVER: Game over screen should have earnings for round, users balance, a text field so the user can input their name and buttons that take you to the main menu or leaderboard.  FR_LEADERBOARD: Leaderboard screen should have top 10 scores along with the users name.  FR_MAIN_MENU: Main menu screen should have buttons for endless mode and scenario mode.  FR_SFX: There should be background music.
Actual Outcome	FR_MAIN_MENU, FR_SFX: As above  FR_GAME_OVER: The game over screen changes depending on whether you are in scenario mode or endless mode. It only shows the time taken to finish scenario and final reputation points or customers served and time survived. There is a button to restart or to return to the main menu screen.  FR_LEADERBOARD: The leaderboard only contains the most customers served in endless mode and the top time for scenario mode.
Failure/Edge Cases	
Status (Pass/Fail)	FAIL, FAIL, PASS, PASS
Pictures	Pictures for scenario mode and endless mode game over screens can be seen above. Leaderboard: 
Notes	There are also other buttons on main menu screen e.g. to alter how many customers you have.


Identifier	TEST_UR_GAMEMODE (2.14)
Short Description	This test will check whether the functionality of different game modes.
Related Requirement(s)	UR_GAMEMODE, FR_CONFIGURE_CUSTOMERS, FR_CUSTOMER_ARRIVALS,

Author	Muaz
Steps	FR_CONFIGURE_CUSTOMERS: See if you can load into scenario mode with alterable numbers of customers.  FR_CUSTOMER_ARRIVALS: Upon loading into endless mode, see if multiple customers arrive at once.
Expected Outcome	FR_CONFIGURE_CUSTOMERS: There should be a menu for selecting how many customers you want.  FR_CUSTOMER_ARRIVALS: There should be multiple customers at a later stage in the endless mode.
Actual Outcome	FR_CONFIGURE_CUSTOMERS: As above  FR_CUSTOMER_ARRIVALS: Only 1 customer arrives at a time
Failure/Edge Cases	Tried moving the scenario mode customers button down to 0 to see if the game crashed. The game does not let you move less than 1.
Status (Pass/Fail)	PASS, FAIL
Pictures	This is the initial options screen. 
Notes	Tried with all three difficulties. All three difficulties still are valid for both endless and scenario mode. Tried with different customers in scenario mode. We did not have time to implement multiple customers.

Identifier	TEST_UR_POWERUPS (2.15)
Short Description	This test will check whether there are 5 powerups the user can collect and activate.
Related Requirement(s)	UR_POWERUPS, FR_POWERUP_EFFECT, FR_POWERUP_APPEARANCE
Author	Muaz
Steps	FR_POWERUP_EFFECT: Start the game, click on N to spawn powerups and click on them to activate. See if they have an effect on the cook.  FR_POWERUP_APPEARANCE: Start the game normally and see if powerups spawn randomly and they are clickable.
Expected Outcome	FR_POWERUP_EFFECT: There should be 5 different powerups, all with different working functionalities.  FR_POWERUP_APPEARANCE: The powerups should spawn randomly and they should be clickable.
Actual Outcome	As above

Failure/Edge Cases	
Status (Pass/Fail)	PASS, PASS
Pictures	The powerups are shown at the top of the screen like so: 
Notes	All 5 powerups have a different function, which you can see once activated. They spawn randomly. Checked if the functions actually work - which they do.

Identifier	TEST_UR_DIFFICULTY (2.16)
Short Description	This test will check whether there are different difficulty levels which the user should be able to choose from. Check for the differences between them.
Related Requirement(s)	UR_DIFFICULTY, FR_SELECT_DIFFICULTY, FR_TIME_DIFFICULTY, FR_POWERUP_DIFFICULTY, FR_LIVES_DIFFICULTY
Author	Muaz
Steps	<p>FR_SELECT_DIFFICULTY: On the main menu check if there is a way to change the difficulty.</p> <p>FR_TIME_DIFFICULTY: Play the game in all 3 difficulties. Check how long the customer waits at the counter for.</p> <p>FR_POWERUP_DIFFICULTY: Play the game in all 3 difficulties. Check how long the powerups last.</p> <p>FR_LIVES_DIFFICULTY: Play the game in all 3 difficulties. Check how many reputation points you start off with.</p>
Expected Outcome	<p>FR_SELECT_DIFFICULTY: You should be able to select the difficulty before going into endless mode.</p> <p>FR_TIME_DIFFICULTY: The customer should wait at the counter for 40 seconds in easy mode, 30 in medium and 20 in hard mode.</p> <p>FR_POWERUP_DIFFICULTY: The powerups should all affect the cooks for differing amounts of time depending on the difficulty.</p> <p>FR_LIVES_DIFFICULTY: You should have 5 reputation points for easy mode, 3 for medium and 1 for hard.</p>
Actual Outcome	As above
Failure/Edge Cases	The difficulty menu is a loop. So instead of the game crashing after clicking right button whilst on HARD, it should go back to EASY. Which was successfully achieved.
Status (Pass/Fail)	PASS, PASS, PASS, PASS

Pictures	
Notes	<p>Tried all three difficulties in both endless and scenario mode. Not all the pictures have been provided, but all has been tested.</p> <p>We have difficulties for both scenario mode and endless mode, even though the requirements did not specify for scenario mode.</p>

Identifier	TEST_UR_SAVESTATES (2.17)
Short Description	This test will check whether there are save states, where users can pause the game and resume at the same point
Related Requirement(s)	UR_SAVESTATES, FR_SAVE_GAME, FR_LOAD_GAME
Author	Muaz
Steps	<p>FR_SAVE_GAME: Click on the pause button. See if the timer stops.</p> <p>FR_LOAD_GAME: Click on the load button. See if the previous game is loaded.</p>
Expected Outcome	<p>FR_SAVE_GAME: The timer should stop and the game should pause.</p> <p>FR_LOAD_GAME: The previous game should load.</p>
Actual Outcome	<p>FR_SAVE_GAME: We do not have a pause button.</p> <p>FR_LOAD_GAME: We do not have a load button.</p>
Failure/Edge Cases	
Status (Pass/Fail)	FAIL, FAIL
Pictures	
Notes	This feature was not successfully implemented, at time of writing.