Test (Description)	Step Details	Expected Results	Actual	Pass/Fail/Suspended/not executed
Add Info				
Add Info: Food gets added successfully	Start KITT app Click 'skip' button on the home screen Click the round + button on the bottom right of screen A.Type: Item name = "apples" Expiration date = *choose date a week from now* Click the round check button at the bottom right of the screen	-Doesn't crash for any input	Does not crash, successfully added	PASS
Food gets added successfully and is in the list view	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	-Doesn't crash for any input -food in database is listed on card view	-Doesn't crash for any input -food in database is listed on card view	PASS
Home Fragment				
Click Home Fragment	Start KITT app, click 'skip' button on the home screen Click on the home fragment	App should not crash, and should successfully go to the settings fragment	App should not crash, and should successfully go to the settings fragment	PASS
Card View	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	-Doesn't crash for any input -automatically takes you to the home fragment -You should see your item listed in the card view, ordered by expiration date -all other food in database should be listed on the card views as well	-Doesn't crash for any input -automatically takes you to the home fragment -You should see your item listed in the card view, ordered by expiration date -all other food in database should be listed on the card views as well	PASS
Swipe to Delete	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date 9. Swipe on the card of the food you want to delete	-When you added a food it should be added into the card view -As you swipe, the card should turn red -Food you wanted to delete should no longer be listed in the card view	-When you added a food it should be added into the card view -As you swipe, the card should turn red -Food you wanted to delete should no longer be listed in the card view	PASS

Snack Bar undo message when you swip to delete	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date 9. Swipe on the card of the food you want to delete 10. Snack bar with the option to undo should appear	-When you added a food it should be added into the card view -When you swipe to delete there should be a snack bard that gives the option to undo deletion -Food you wanted to delete should no longer be listed in the card view	-When you added a food it should be added into the card view -When you swipe to delete there should be a snack bard that gives the option to undo deletion -Food you wanted to delete should no longer be listed in the card view	PASS
Foods that are already expired	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose tomorrows date* 6. Click the round check button at the bottom right of the screen 7. Click the round + button on the bottom right of screen 8. Type: Item name = "pasta" Expiration date = *choose date a week from now* 9. Click the round check button at the bottom right of the screen 10. Click the round check button on the bottom right of screen 11. Type: Item name = "banana" Expiration date = *choose date three days from now* 12. Click the round check button at the bottom right of the screen 13. Click the round + button on the bottom right of screen 14. Type: Item name = "mac n cheese" Expiration date = *choose date 2 days from now* 15. Click the round check button at the bottom right of the screen 16. Leave emulator open until the soonest date of expiration	-cards for foods that are already expired should be in a different color	-cards for foods that are already expired are in a different color	PASS
Calendar Fragment				
Click Calendar Fragment	Start KITT app, click 'skip' button on the home screen Click on the calendar fragment	-App should not crash, and should successfully go to the calendar fragment	App does not crash, goes to calendar view	PASS
Calendar View	Start KITT app, click 'skip' button on the home screen Click the Calendar icon (middle) User should see a calendar view	User should see a calendar, starting with the current month, and current day should be labeled in a different color - User can click on arrows at the top to switch between months	Calendar view appears, arrows work to change months, month starts on current month, todays day is a different color	PASS
Calendar Icons	Start KITT app, click 'skip' button on the home screen Click the Calendar icon (middle) User should see a calendar view with gray icons on days where food has expired and green icons on days food will expire	-User should see green icons on days food will expire in the future - User will see grey icons on the days food has already expired	- Icons before todays date are grey, icons afer todays date are green - icons are sometimes one day off of the actual date	FAIL

	1. Start KITT app, click 'skip' button on the home screen			
Calendar Dialog	2. Click the Calendar icon (middle) 3. User should see a calendar view with icons 4. User can click on a day a food expires and receive a pop up stating which food has or will expire 5. User can click 'Okay' to exit the pop up	- User should get a pop up that lists the foods that expire on that day - Duplicate foods will also be listed - User can tap okay for the dialog to disappear and return to the calendar view	-User receives correct list of foods when clicked on the correct date - okay works to go back to the calendar view	PASS
Settings Fragment				
Clicking on Settings Fragment	Start KITT app, click 'skip' button on the home screen Click on the settings fragment	-App should not crash, and should successfully go to the settings fragment	- App does not crash successfully goes to settings page	PASS
Change Notification Frequency	Start KITT app, click 'skip' button on the home screen Click the settings icon on the bottom right of screen User should see settings page with notification settings	-App should not crash, and should successfully go to the settings fragment -Notification settings should appear, user can toggle notification switch on/off and tap on the notifications frequency	- App does not crash successfully goes to settings page - user can toggle on/off switch and tap on notifications frequency	PASS
Checkbox Preferences	Start KITT app, click 'skip' button on the home screen Click the settings icon on the bottom right of screen Suser should see settings page with notification settings Upon tapping change notification frequency, user receives a pop up with 4 different checkboxes to select	- App should not crash - User should see a pop up displaying a checkbox preference with 4 options	- App does not crash - User sees a pop up displaying a checkbox preference with 4 option	PASS
Welcome Activity				
App Opens	Start KITT app Welcome Activity should appear	-App should not crash	-App should not crash	PASS
Google Sign In Button Opens Login Page	Start KITT app Welcome Activity appears User clicks google sign in button Sign in page appears	- App should not crash - Google sign in page appears - google sign in works	- App does not crash - Google sign in page appears - google sign in works	PASS
Dark Theme				
Dark theme for welcome activity	Start KITT app Welcome Activity should appear in Dark Theme	All previously light colors changed to dark Colors go together well and stay on theme	All previously light colors changed to dark Colors go together well and stay on theme	PASS
Dark Theme for Home Fragment	Start KITT app Click 'skip' on welcome activity Home Fragment should appear in Dark theme	All previously light colors changed to dark Colors go together well and stay on theme	All previously light colors changed to dark Colors go together well and stay on theme	PASS
Dark Theme for Calendar Fragment	Start KITT app Click 'skip' on welcome activity Click on Calendar tab Calendar should appear in dark theme	- All previously light colors changed to dark - Colors go together well and stay on theme	All previously light colors changed to dark Colors go together well and stay on theme	PASS
Dark Theme for Settings Fragment	Start KITT app Click 'skip' on welcome activity Click on Settings tab Settings page should appear in dark theme	- All previously light colors changed to dark - Colors go together well and stay on theme	- All previously light colors changed to dark - Colors go together well and stay on theme	PASS
Dark Theme for Add Info	Start KITT app Click 'skip' on welcome activity Click on the plus button at the bottom Add Info page should appear in dark theme	- All previously light colors changed to dark - Colors go together well and stay on theme	All previously light colors changed to dark Colors go together well and stay on theme	PASS

Dark Theme for Date Picker	Start KITT app Click 'skip' on welcome activity Click on the plus button at the bottom Click on the box to fill in expiry dates Date picker should appear in dark theme	- Colors stay the same as in Light mode	- Colors stay the same as in Light mode	PASS
User Experience				
User	Feedback			
User 1	* .	ne items name, it was fast and simple	le to use	
User 2	Looks nice, notification functionali	ty and settings are not obvious		
Notifications				
Notification Preferences Checkboxes - ALL FOUR CHECKED	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF ITEM ADDED AFTER 11AM then the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am *IF ITEM ADDED BEFORE 11AM then the user should recieve a notification at 11am the day you set it 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am 4. User should also receive a notification the day of expiration at 11am	User gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 5 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am and time is passed 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am 4. User should also receive a notification the day of expiration at 11am	User gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 2 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days before at 11am and that has passed 2. User should also receive a notification a day before expiration date at 11am 3.User should also receive a notification the day of expiration at 11am	User gets immediate notification	fails

	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 1 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days and 1 day before at 11am and that has passed *IF FOOD ITEM ADDED BEFORE 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days, AND should receive notification that day at 11am 2. user should recieve a notification on the day of expiry at 11am	User gets immediate notification	fails
Notification Preferences Checkboxes - 7DAYS BEFORE, 3DAYS BEFORE, 1DAY BEFORE	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	*IF ITEM ADDED AFTER 11AM then the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am *IF ITEM ADDED BEFORE 11AM then the user should recieve a notification at 11am the day you set it 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am	User gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date 5 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am and time is passed 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am	user gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date 2 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days before at 11am and that has passed 2. User should also receive a notification a day before expiration date at 11am	user gets immediate notification	fails

	"1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 1 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date"	1. *IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days and 1 day before at 11am and that has passed *IF FOOD ITEM ADDED BEFORE 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days, AND should receive notification that day at 11am	user gets immediate notification	fàils
Notification Preferences Checkboxes - 7DAYS BEFORE, 3DAYS BEFORE	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF ITEM ADDED AFTER 11AM then the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am *IF ITEM ADDED BEFORE 11AM then the user should recieve a notification at 11am the day you set it 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am	user gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 5 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. the user should recieve a notification almost immediately since there's a notification setting set for a week before at 11am and time is passed 2. User should recieve a notification 3 days before the expiration date at 11am 3. User should also receive a notification a day before expiration date at 11am	user gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 2 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	*IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days before at 11am and that has passed User should also receive a notification a day before expiration date at 11am	user gets immediate notification	fails
	"1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 1 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date"	1. *IF FOOD ITEM ADDED AFTER 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days and 1 day before at 11am and that has passed *IF FOOD ITEM ADDED BEFORE 11AM the user should recieve a notification almost immediately since there's a notification setting set for a week before and 3 days, AND should receive notification that day at 11am	user gets immediate notification	fails

Notification Preferences Checkboxes - IDAY BEFORE, DAY OF EXPIRY	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date a week from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED BEFORE 11AM user should receive a notification the day of at 11am *IF FOOD ITEM ADDED AFTER 11AM user should receive a notification immediately 2. user should receive a notification on the day of expiry at 11am	user gets immediate notification	FAIL
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 5 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED BEFORE 11AM user should receive a notification the day of at 11am *IF FOOD ITEM ADDED AFTER 11AM user should receive a notification immediately 2. user should receive a notification on the day of expiry at 11am	user gets immediate notification	fails
	1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5.Type: Item name = "apples" Expiration date = *choose date 2 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date	1. *IF FOOD ITEM ADDED BEFORE 11AM user should receive a notification the day of at 11am *IF FOOD ITEM ADDED AFTER 11AM user should receive a notification immediately 2. user should receive a notification on the day of expiry at 11am	user gets immediate notification	fails
	"1. Go to Add Info 2. Start KITT app 3. Click 'skip' button on the home screen 4. Click the round + button on the bottom right of screen 5. Type: Item name = "apples" Expiration date = *choose date 1 DAYS from now* 6. Click the round check button at the bottom right of the screen 7. Go to Home Fragment 8. User should see their inputted food item listed in the card view ordered by expiration date"	1. *IF FOOD ITEM ADDED BEFORE 11AM user should receive a notification the day of at 11am *IF FOOD ITEM ADDED AFTER 11AM user should receive a notification immediately 2. user should recieve a notification on the day of expiry at 11am	user gets immediate notification	fails
FirestoreDB				
addData	Sign into Google Send FoodDetail Object and an int ID (call addData) Repeat steps but disconnect from the internet and mobile data	Should be able to see an update on the Firestore database. If write fails due to lack of internet connectivity, the app should not stall or crash.	Data is seen on firebase. If the app lacks internet services, the connection will time out and an error message appears in the system log. App does not stall or crash.	PASS
getAllFood	Sign into Google Retrieve data from Firestore and place data into a FoodDetail Object (call getAllFood)	All entires from the SQLite DB are dropped and data from the Firestore is added. App should not crash or stall if not connected to the internet.	SQLite table is updated with data retrieved from Firestore. App does not crash or stall when there isn't internet connection	PASS

deleteFood	Sign into Google Call deleteFood(ID) to delete food item from Firestore	Should be able to see an update on the Firestore database. If there's no internet, the APP should not crash or stall	Firestore database does update with the correct deletion. App does not crash or stall if there's no internet	PASS
FirebaseUIActivity		Should not crash of stan	there's no internet	
createSignInIntent	Sign into Google with and without internet	If internet connection is established, user should be able to sign in and be seen in Firebase console. App should not crash or stall if the sign in fails due to lack of internet conenction.	Able to see user in Firebase console. App does not crash or stall if no internet connection	PASS
signOut	Sign out of Google with and without internet	Logouts cannot be seen from the Firebase console but it should be obvious the user signed out if they click on sign in right afterwords, as the prompt would be different if already signed in	User signs out successfully with internet connection. Without internet connection, the app does not crash or stall. Actually, the app appears to sign out once it reconnect to the internet.	PASS
SQLiteDBHelper				
addFood	Call addFood with a FoodDetail object given as a parameter Check table to see entry was added	The FoodDetail object fields should be deconstructed and added to the table. Each entry should be given an auto incremeted integer key.	Table updates correctly and interger key is correctly incremented	PASS
removeFood	Call removeFood given an Int id Check table to see the correct entry was deleted	Given an Int ID, you should be able to delete an entry with the integer key from the table	Correct entry is deleted	PASS
deleteTable	 Make sure table has entries Call deleteTable Check table to see if empty 	Calling this function should remove all entries from the table	All items removed	PASS
getAllFood	Make sure table has entires Make call to getAllFood Check returned list for FoodDetail objects Repeaat steps but with an empty table	Calling this function should return a list of all entries from the table as a FoodDetail object. If no entry exists, it should return an emtpy list	A list of FoodObjects is returned. An empty array list is returned if no entries exits	PASS