

Lab 3: Test Cases

Sprint 1

Test Case Number	TC 01
Test Item	User Login (Sign in Field)
Pre-conditions	User has launched the app
Post-conditions	User has successfully logged into their email account
Input Specifications	Case 1: <ul style="list-style-type: none">• User has entered an email address• User has entered a password Alternative Case: <ul style="list-style-type: none">• User presses Google sign in button
Expected Output Specifications	<ul style="list-style-type: none">• User is signed in and the basic menu is displayed
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none">• User has entered a valid username and password combination• User has been successfully authenticated by Google token Fail Criteria <ul style="list-style-type: none">• User enters an email/password that exceeds the character limit• User fails to enter correct email• User fails to enter correct password
Assumptions and Constraints	Assumptions <ul style="list-style-type: none">• Assume if we have a valid email and password combination, or a valid google account, we login Constraints <ul style="list-style-type: none">• Email account must exist
Dependencies	None

Test Case Number	TC 02
Test Item	Create Account

Pre-conditions	User has launched the app
Post-conditions	User has created an account
Input Specifications	<ul style="list-style-type: none"> • User has pressed create account button • User has entered a valid email address and password
Expected Output Specifications	<ul style="list-style-type: none"> • User has created account and successfully logged in
Pass/Fail Criteria	<p>Pass Criteria</p> <ul style="list-style-type: none"> • User enters email address and password that meet criteria <p>Fail Criteria</p> <ul style="list-style-type: none"> • User does not enter email address and password that meet criteria
Assumptions and Constraints	<p>Assumptions</p> <ul style="list-style-type: none"> • Assume the user is entering valid criteria in order to register a new account <p>Constraints</p> <ul style="list-style-type: none"> • User must enter valid alphanumeric characters along with appropriate @ symbol
Dependencies	None

Test Case Number	TC 03
Test Item	User Logout
Pre-conditions	User has successfully logged in
Post-conditions	User has successfully logged out
Input Specifications	<ul style="list-style-type: none"> • User presses logout button on home menu
Expected Output Specifications	<ul style="list-style-type: none"> • User is prompted to logout • User is logged out
Pass/Fail Criteria	<p>Pass Criteria</p> <ul style="list-style-type: none"> • User is successfully prompted to logout

	Fail Criteria <ul style="list-style-type: none"> • User fails to logout
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> • Assume the user is already logged in Constraints <ul style="list-style-type: none"> • None
Dependencies	TC 01

Test Case Number	TC 04
Test Item	Launch Scanner
Pre-conditions	User has successfully logged in
Post-conditions	User has successfully launched the scanner feature
Input Specifications	<ul style="list-style-type: none"> • User presses scanner button on home menu
Expected Output Specifications	<ul style="list-style-type: none"> • Scanner page launches
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none"> • User successfully launches scanner page Fail Criteria <ul style="list-style-type: none"> • User fails to launch scanner
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> • Assume user is already logged in • User has a functional camera Constraints <ul style="list-style-type: none"> • User enables permission to use camera
Dependencies	TC 01

Test Case Number	TC 05
Test Item	Scan Barcode
Pre-conditions	<ul style="list-style-type: none"> • User has successfully logged in • User has successfully launched scanner

Post-conditions	<ul style="list-style-type: none"> User scans barcode
Input Specifications	<ul style="list-style-type: none"> User scans barcode with camera
Expected Output Specifications	<ul style="list-style-type: none"> Scanner returns product information
Pass/Fail Criteria	Pass criteria <ul style="list-style-type: none"> User successfully scans barcode Application returns item information Fail Criteria <ul style="list-style-type: none"> User fails to scan barcode
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> Assume user is already logged in Assume user has launched scanner Constraints <ul style="list-style-type: none"> User has a working camera User has a proper barcode to scan
Dependencies	TC 01, TC 04

END SPRINT 1

Sprint 2

Test Case Number	TC 06
Test Item	Display products nearby
Pre-conditions	<ul style="list-style-type: none"> User has successfully logged in User has scanned a product's barcode
Post-conditions	<ul style="list-style-type: none"> User is shown available products nearby to purchase
Input Specifications	<ul style="list-style-type: none"> User presses map button
Expected Output Specifications	<ul style="list-style-type: none"> Google maps view shows user a list of products nearby that are available for purchase
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none"> User is able to view map with nearby products Fail Criteria <ul style="list-style-type: none"> Map fails to load
Assumptions and Constraints	Assumptions

	<ul style="list-style-type: none"> • Assume user is logged in • Assume scanner has been launched • Assume product has been scanned Constraints <ul style="list-style-type: none"> • Product must be available
Dependencies	TC 01, TC 04, TC 05

Test Case Number	TC 07
Test Item	View Scan History
Pre-conditions	<ul style="list-style-type: none"> • User has successfully logged in • User has scanned a barcode
Post-conditions	<ul style="list-style-type: none"> • User has past scan history displayed
Input Specifications	<ul style="list-style-type: none"> • User presses view scan history button
Expected Output Specifications	<ul style="list-style-type: none"> • User has a list of previous item scan history returned to them
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none"> • Scan history is displayed Fail Criteria <ul style="list-style-type: none"> • Database fails to be queried in time • Database query retrieval fails • Database loses scan history information
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> • Assume user is logged in • Assume scanner has been launched • Assume product has been scanned Constraints <ul style="list-style-type: none"> • None
Dependencies	TC 01, TC 04, TC 05

Test Case Number	TC 08
Test Item	Delete Scan History
Pre-conditions	<ul style="list-style-type: none"> • User has successfully logged in • User has scanned a barcode
Post-conditions	<ul style="list-style-type: none"> • User's deletes product from scan history
Input Specifications	<ul style="list-style-type: none"> • User presses delete scan history button • User chooses product to delete
Expected Output Specifications	<ul style="list-style-type: none"> • Specified item is no longer present in scan history
Pass/Fail Criteria	<p>Pass criteria</p> <ul style="list-style-type: none"> • Specified item is successfully deleted from scan history <p>Fail criteria</p> <ul style="list-style-type: none"> • Specified item is still present in scan history
Assumptions and Constraints	<p>Assumptions</p> <ul style="list-style-type: none"> • Assume user is already logged in • Assume user has opened scan history • Assume user has items in scan history <p>Constraints</p> <ul style="list-style-type: none"> • None
Dependencies	TC 01, TC 04, TC 05, TC 07

END SPRINT 2

Sprint 3

Test Case Number	TC 09
Test Item	Get directions to store location from scan
Pre-conditions	<ul style="list-style-type: none"> • User has successfully logged in • User has scanned item • User has GPS enabled for app
Post-conditions	<ul style="list-style-type: none"> • User has Google Apps providing

	directions to store
Input Specifications	<ul style="list-style-type: none"> • User scans barcode • User selects Get Location button
Expected Output Specifications	<ul style="list-style-type: none"> • Google Maps provides directions to address of store selected by user
Pass/Fail Criteria	Pass criteria <ul style="list-style-type: none"> • User can arrive at store with directions provided Fail criteria <ul style="list-style-type: none"> • Incorrect/No directions provided to user
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> • Assume user is already logged in • Assume user has scanned an item • Assume user has internet connection • Assume user is on Earth Constraints <ul style="list-style-type: none"> • Requires GPS coverage
Dependencies	TC 01, TC 04, TC 05

Test Case Number	TC 10
Test Item	Share prices of scanned items on Facebook
Pre-conditions	<ul style="list-style-type: none"> • User has successfully logged in • User has scanned item • Logged into Facebook App
Post-conditions	<ul style="list-style-type: none"> • Share price of scanned item on Facebook/Facebook Messenger
Input Specifications	<ul style="list-style-type: none"> • User scans barcode • User selects share price button • User submits post to Facebook
Expected Output Specifications	<ul style="list-style-type: none"> • Post submitted on Facebook about scanned item and price
Pass/Fail Criteria	Pass criteria <ul style="list-style-type: none"> • Post was successfully posted on Facebook Fail criteria

	<ul style="list-style-type: none"> Post failed to be submitted or posted.
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> Assume user is already logged in Assume user has scanned an item Assume user has internet connection Assume user has Facebook account Constraints <ul style="list-style-type: none"> None
Dependencies	TC 01, TC 04, TC 05

Test Case Number	TC 11
Test Item	View Scanned Product's Reviews
Pre-conditions	<ul style="list-style-type: none"> User has successfully logged in User has scanned a barcode
Post-conditions	<ul style="list-style-type: none"> User has list of reviews and rating on scanned item
Input Specifications	<ul style="list-style-type: none"> User scans barcode User selects Reviews button
Expected Output Specifications	<ul style="list-style-type: none"> Reviews for scanned item collected and displayed
Pass/Fail Criteria	Pass criteria <ul style="list-style-type: none"> Reviews for scanned items displayed on screen Fail criteria <ul style="list-style-type: none"> Nothing or incorrect item is displayed.
Assumptions and Constraints	Assumptions <ul style="list-style-type: none"> Assume user is already logged in Assume user has scanned an item Assume user has internet connection Constraints <ul style="list-style-type: none"> None
Dependencies	TC 01, TC 04, TC 05

End SPRINT 3

Sprint 4

Test Case Number	TC 12
Test Item	Find cheapest price for a product
Pre-conditions	<ul style="list-style-type: none">• User has logged in• User has scanned an item
Post-conditions	<ul style="list-style-type: none">• Webcrawler finds the best price for the item scanned• Application displays the lowest price
Input Specifications	<ul style="list-style-type: none">• User scans an item
Expected Output Specifications	<ul style="list-style-type: none">• Application display the lowest price
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none">• Application displays the lowest price Fail Criteria <ul style="list-style-type: none">• Price is not displayed
Assumptions and Constraints	<ul style="list-style-type: none">• Assume user has scanned an item
Dependencies	TC 01, TC 04, TC 05

Test Case Number	TC 13
Test Item	Show similar products scanned.
Pre-conditions	<ul style="list-style-type: none">• User has logged in.• User has scanned at least 1 product.
Post-conditions	<ul style="list-style-type: none">• User has a list of products similar to previously scanned items.
Input Specifications	<ul style="list-style-type: none">• User selects the appropriate menu item.
Expected Output Specifications	<ul style="list-style-type: none">• Display a list of items similar to the scanned.
Pass/Fail Criteria	Pass Criteria

	<ul style="list-style-type: none"> Screen displays an array of items that have similarity to their previously scanned items. Fail Criteria <ul style="list-style-type: none"> Database fails to return any information. Application crashes when database request is sent.
Assumptions and Constraints	<ul style="list-style-type: none"> Assume the user is logged in. Assume the user selected the correct menu item. Assume the user has scanned at least 1 product.
Dependencies	TC 01, TC 02, TC 04, TC 05, TC 06

Test Case Number	TC 14
Test Item	See popular scanned items
Pre-conditions	<ul style="list-style-type: none"> User has successfully logged in User has successfully navigated to the popular items page
Post-conditions	<ul style="list-style-type: none"> Display images of top popular scanned items with names
Input Specifications	<ul style="list-style-type: none"> User pressed Popular Items on navigation bar
Expected Output Specifications	<ul style="list-style-type: none"> User is presented with a list of images of the most popularly scanned items
Pass/Fail Criteria	Pass Criteria <ul style="list-style-type: none"> User is presented with a list of popularly scanned items Fail Criteria <ul style="list-style-type: none"> Database fails to query popular items Application fails to display images with name of product
Assumptions and Constraints	<ul style="list-style-type: none"> Assume user is logged in Assume user has navigated successfully to the Popular Items

	page • Assume products have been previously scanned
Dependencies	TC 01

Non Functional Tests:

Test Case Number	NF 01
Test Item	Database Network Performance Test
Pre-conditions	<ul style="list-style-type: none">• Internet Access• Application Running• Online Database Running
Post-conditions	<ul style="list-style-type: none">• Access to Database was successful• Ping time was tracked
Input Specifications	Start variable for tracking time
Expected Output Specifications	End variable for final time
Pass/Fail Criteria	Pass: Successful communicated with Database before API timeout Fail: Unsuccessful before API timeout
Assumptions and Constraints	Assumption: The application can successfully launch, access the internet and make the query calls. Constraint: Database is live, internet access is granted and Application is valid.
Dependencies	Jsoup html parser library, UPC database, Barcode lookup database.

Test Case Number	NF 02
Test Item	WebCrawler Network Performance Test
Pre-conditions	<ul style="list-style-type: none">• Internet Access• Application Running• Websites are live
Post-conditions	<ul style="list-style-type: none">• Access to websites successful• Ping Time was tracked

Input Specifications	Start variable for tracking time
Expected Output Specifications	End variable for final time
Pass/Fail Criteria	Pass: Successfully queried sites before API timeout. Fail: Unsuccessful before API timeout.
Assumptions and Constraints	Assumption: The application can successfully launch, access the internet and make the calls. Constraint: Websites are live, internet access is granted and Application is valid.
Dependencies	Jsoup html parser library, various queried websites

Test Case Number	NF 03
Test Item	Application Stress Test
Pre-conditions	Application is running
Post-conditions	Application has not crashed
Input Specifications	N/A
Expected Output Specifications	N/A
Pass/Fail Criteria	Pass: App is still running at the end of the test. Fail: App is not running at the end of the test.
Assumptions and Constraints	Assumption: The application will be able to withstand the Monkey Stress Test. Constraint: Application is valid
Dependencies	Monkey Stress Test.