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Wasail

PRJ-F23/333

IMPLEMENTATION DOCUMENT

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Introduction

App Development

Test Cases

Test Case 1: Language Selection

Test Scenario: The user wants to select their preferred language.

Preconditions: The user has not specified their preferred language.

Postconditions: The user has specified their preferred language.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Select preferred language	English	Text displayed in English. English is saved as the preferred language.	Text displayed in English. English is saved as the preferred language.	Pass
		Urdu	Text displayed in Urdu. Urdu is saved as the preferred language.	Text displayed in Urdu. Urdu is saved as the preferred language.	Pass
		Roman Urdu	Text displayed in Roman Urdu. Roman Urdu is saved as the preferred language.	Text displayed in English. English is saved as the preferred language.	Fail

Test Case 2: Phone Registration

Test Scenario: The user wants to create an account using their phone number.

Preconditions: The user has opened the app.

Postconditions: The user is directed to the phone number confirmation screen.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter phone number	3213439305	Confirmation screen should be displayed	Confirmation screen is displayed	Pass

Test Case 3: Phone Number Confirmation

Test Scenario: The user wants to confirm their entered phone number.

Preconditions: The user has entered their phone number.

Postconditions: The phone confirmation dialogue box should open with options to edit and/or confirm.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Selects the option to edit	3213439305	User should be able to edit their phone number , incase it is incorrect	User edits their phone number	Pass
	Selected the option to confirm	3213439306	User should be able to confirm their phone number	User confirms their phone number	Pass

Test Case 4: Phone Number Exists

Test Scenario: The user should be directed to either login or registration screen based on whether the phone number exists or not.

Preconditions: The user has confirmed their phone number.

Postconditions: The user is redirected to either the login or the registration page.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	User has confirmed their phone number	3213439305 (exists)	User should be directed to the login screen	The login screen is displayed.	Pass
		3213439306 (doesn't exist)	User should be directed to the registration screen	The registration screen is displayed	Pass

Test Case 5: Vendor Registration

Test Scenario: The user should enter their details.

Preconditions: The user is on the registration page.

Postconditions: The user has successfully been registered.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter username	fizza	Already exists in the database, ask for re-entry	Asks for re-entry	Pass
		fizza123	Does not exist in the database, accepts the username	Accepts the username	Pass

Test Case 6: Valid Password

Test Scenario: The user should enter a password.

Preconditions: The user is on the registration page.

Postconditions: The user has entered a valid password.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter password	123	The system should indicate that it is an invalid password and ask for re-entry.	The system does indicate that it is an invalid password and asks for re-entry.	Pass
		password	The system should indicate that it is an invalid password and ask for re-entry.	The system does indicate that it is an invalid password and asks for re-entry.	Pass
		lahore@1	The system should indicate that it is a valid password	Accepts the password	Pass

Test Case 7: Username Exists

Test Scenario: The user should enter a username.

Preconditions: The user is on the registration page.

Postconditions: The user has entered a username.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter username	fizza	Already exists in the database, ask for re-entry	Asks for re-entry	Pass
		fizza123	Does not exist in the database, accepts the username	Accepts the username	Pass

Test Case 8: Login

Test Scenario: Registered users want to log in using their credentials.

Preconditions: The user is on the login page.

Postconditions: The user logged in.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter password	lahore123	Incorrect password, Asks for re-entry	Asks for re-entry	Pass
		lahore@1	Correct password. User should be able to login	User logs in.	Pass

Test Case 9: Search Product in Inventory

Test Scenario: The system should allow the user to search for a product from their inventory.

Preconditions: The user is logged in and on the home page.

Postconditions: The system retrieves the matching product's page.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The system directs the vendor to the homepage where the search bar is		The user is on the home page	The user successfully navigates to the home page	Pass
2	The vendor can search product name from their own inventory	Olpers	The system allows the user to enter the search criteria	The system allows the user to enter the search criteria	Pass
3	The system fetches results for searched product by name	Olpers	The system is able to retrieve product matching to name criteria	The system is able to retrieve product matching to name criteria	Fail

Test Case 10: All Product Search

Test Scenario: The user should be able to search a product from the product listings.

Preconditions: The user is on the products search page.

Postconditions: The has searched the product.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter product name	milk	All products containing the word Lays should be displayed	All products containing the word Lays are being displayed	Pass
		Lays	All products containing the word Lays should be displayed	All products containing the word Lays are being displayed	Pass

		Coke	If the product does not exist in the database, nothing should be displayed	No results are displayed	Pass
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Test Case 11: Remove Product

Test Scenario: The user should remove a product from their inventory.

Preconditions: The user is on the product's page.

Postconditions: The user has removed a product.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	Enter product name	Lays	Product should be displayed along with its description and delete option	Product is being displayed along with delete option	Pass
2	Press delete		System should delete the product from the user's database	The product is deleted	Pass

Test Case 12: Add Product to Inventory

Test Scenario: The vendor wants to add a new product to their inventory.

Preconditions: The vendor is logged in and on the inventory page.

Postconditions: The user has added the product.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The user searches for a product by entering its name	Coca Cola	All products under the name Coca Cola should be displayed	The products under the name Coca Cola are displayed	Pass
2	Add details after selecting a product from the listing namely price, listed amount and available amount	Price: 120 Listed: 28 Available: 23	Details of product, price, listed amount and the available amount should be added	Details of product, price, listed amount and the available amount are added	Pass

3	Confirm addition to the vendor inventory		Product added to inventory should display under the SKUs list on inventory page with its details	Product added to inventory is displayed under the SKUs list on inventory page with its details	Pass
---	--	--	--	--	------

Test Case 13: Edit Product in Inventory

Test Scenario: The vendor wants to edit the details of a product in their inventory.

Preconditions: The vendor has added the product to their inventory.

Postconditions: The user has edited the product.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The system displays the product inventory page for the vendor	Coca Cola Lays lays water	All products in vendor inventory should be displayed	All products in vendor inventory are displayed	Pass
2	The system gives the vendor the option to edit the product details: listed amount, available amount, and price	Selected Product: Coca Cola Old details: Price: 120 Listed: 28 Available: 23	Current details of product, price, listed amount and the available amount in the system should be visible when edit dialog opens	Current details of product, price, listed amount and the available amount in the system are visible when edit dialog opens	Pass
3	The vendor edits the product details over the old details	Selected Product: Coca Cola New details: Price: 120 Listed: 35 Available: 28	Product details should be editable over the current ones displayed	Product details are editable over the current ones displayed	Pass
4	The system saves the edited product details		The details should get saved and updated in the inventory accordingly	The details get saved and updated in the inventory accordingly	Pass

Test Case 14: View Grocery Store List

Test Scenario: The vendor wants to view the grocery store list.

Preconditions: The vendor is logged in.

Postconditions: The grocery store list is displayed.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The vendor clicks on the "Stores List" section in menu	Jalal Sons Esajees	The system should display a list of grocery stores	The system displays a list of grocery stores	Pass

Test Case 15: View Grocery Store Profile

Test Scenario: The vendor wants to view the profile of a specific grocery store.

Preconditions: The vendor is on the store list page.

Postconditions: The grocery store profile is displayed.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The vendor clicks on a Grocery Store in "Store List"	Jalal Sons	The system should display all details of grocery store, namely name, image and address	The system displays all details of grocery store, namely name, image and address	Pass

Test Case 16: OTP Code Generation and Delivery

Test Scenario: The system should send an OTP code to the user's phone number.

Preconditions: The user has confirmed their phone number.

Postconditions: The user has entered the OTP and is directed to the account details page.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	System can confirm phone number of user	3355600598	Phone number should be confirmed	Phone number is confirmed	Pass
2	Generate OTP code and send via SMS		A 4-digit unique OTP code should be generated and sent	A 4-digit unique OTP code is not generated and sent	Fail

3	Wait for 60 seconds to allow resending OTP		Timer is displayed to the user, indicating the ability to resend OTP after 60 seconds	Timer is displayed to the user, indicating the ability to resend OTP after 60 seconds	Pass
4	The system resends another OTP after timer closes		A new OTP code is generated and sent after 60 seconds	A new OTP code is not generated and sent after 60 seconds	Fail
5	The system verifies the validity of the OTP code by comparing it to the generated code sent to the given phone number		System verifies the entered OTP with the generated code	System does not verify the entered OTP with the generated code	Fail
6	Upon verification, the user shall be directed to the account details page.		User is directed to the account details page upon successful OTP verification	User is not directed to the account details page due to unsuccessful OTP verification	Fail

Test Case 17: Logout

Test Scenario: The system should allow the user to logout.

Preconditions: The user is logged in and on the menu.

Postconditions: The user is logged out.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The system should allow user to view logout		The system gives the user the option to log out	The system displays the option to log out	Pass

	option when scrolling down in menu				
2	The user clicks on the logout option		The user should get logged out of the system	The user is logged out of the system	Pass

Test Case 18: Reset Password

Test Scenario: The system should allow the user to reset their password.

Preconditions: The user is registered.

Postconditions: The user's password is successfully reset.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The system should give the user the option for resetting their password		The system gives the user the option to reset their password	The system gives the user the option to reset their password	Fail

Test Case 19: View Profile

Test Scenario: The system should allow the user to view their own profile.

Preconditions: The user is on their own profile.

Postconditions: The user is able to view their profile.

#	Test Steps	Test Data	Expected Result	Actual Result	Status
1	The user navigates to the menu option to have details be displayed to him including his own		The system displays menu page where by the profile details are visible	The system displays menu page where by the profile details are visible	Pass

	profile				
2	The system retrieves users 'profile details and displays it to him		The system should be displayed users' profile details; his name, profile picture	The system is not displaying users' profile details; his name, profile picture	Fail

Machine Learning

Introduction

Data Collection

Feature Engineering

Model Shortlisting

Training and Testing

```
In [2]: df = pd.read_csv('../Data/Pharmacy/D4.csv')
```

```
In [3]: df.head()
```

Out[3]:

	date	itemname	packunits	expiry	price	looseqty
0	01/07/2022	10CC SHIFA D/SYRINGE(UNJT)(BM)	100	12/12/24	30.00	6
1	01/07/2022	1CC BD SYRINGE	100	12/12/24	30.00	1
2	01/07/2022	3CC SYRINGE INJEKT	100	3/1/24	15.00	3
3	01/07/2022	ACCU CHECK LANCET (CHINA)	200	12/12/24	3.00	50
4	01/07/2022	ACDERMIN GEL	1	5/1/23	278.44	1

```
In [4]: df.shape
```

Out[4]: (213056, 6)

Figure 2.1.1

```
In [5]: X = df[['date', 'itemname', 'packunits', 'expiry', 'price']]  
y = df['looseqty']
```

```
In [6]: X = pd.get_dummies(X)
```

```
In [7]: X.shape
```

Out[7]: (213056, 7477)

Figure 2.1.2

```
In [8]: split_index = int(0.8 * len(df))
```

```
In [9]: X_train, X_test = X[:split_index], X[split_index:]  
y_train, y_test = y[:split_index], y[split_index:]
```

Figure 2.1.3

```
In [10]: rf_model = RandomForestRegressor(n_estimators=100, random_state=42)
```

```
In [*]: rf_model.fit(X_train, y_train)
```

Figure 2.1.4

The screenshot shows a Google Colab notebook interface. The top bar includes a menu icon, '+ Code + Text', 'All changes saved', RAM and Disk usage indicators, 'Colab AI', and user settings. The notebook contains several code cells:

- Cell 1: `df.shape` returns `(213056, 6)`.
- Cell 2: `X = df[['date', 'itemname', 'packunits', 'expiry', 'price']]` and `y = df['looseqty']`.
- Cell 3: `X = pd.get_dummies(X)`.
- Cell 4: `X.shape` returns `(213056, 7477)`.
- Cell 5: `split_index = int(0.8 * len(df))`.
- Cell 6: `X_train, X_test = X[:split_index], X[split_index:]` and `y_train, y_test = y[:split_index], y[split_index:]`.
- Cell 7: `rf_model = RandomForestRegressor(n_estimators=100, random_state=42)`.
- Cell 8: `rf_model.fit(X_train, y_train)`.

A black error message box is overlaid on the bottom left, stating: "Your session crashed after using all available RAM. If you are interested in access to high-RAM runtimes, you may want to check out [View runtime logs](#) [Colab Pro](#)." The bottom status bar shows "Connected to Python 3 Google Compute Engine backend".

Figure 2.1.5

Deployment