### Detailed Work Flow: Agent and Customer Application with Store Location and Banning Features

### 1. Agent Registration and QR Code Generation

#### 1.1. Agent Downloads the App

- Step: Agent clicks on the provided link to download the app from the app store (Google Play or Apple App Store).

#### 1.2. Agent Signs Up with Phone Number

- Step: Agent opens the app and is presented with a sign-up screen.

- Details: The sign-up screen includes fields for phone number and a password.

- Validation: Ensure the phone number is unique and not already taken.

#### 1.3. Enter Agent Username

- Step: After successfully registering with phone number and password, the app prompts the agent to enter a unique username (e.g., 'john45').

- Validation: The app checks if the username is already taken. If it is, the agent is prompted to choose a different username.

#### 1.4. QR Code Generation

- Step: Once a unique username is chosen, the app generates a unique QR code for the agent based on their username.

- Details: The QR code is linked to the agent’s username and stored in the database.

#### 1.5. Display QR Code

- Step: The generated QR code is displayed in the app for the agent to save or share with their customers.

### 2. Sharing QR Code with Customers

#### 2.1. Agent Shares QR Code and Social Media Links via Telegram

- Step: The agent shares the QR code with their customers along with links to my social media (e.g., Telegram channel).

- Details: This can be done via Telegram.

### 3. Customers' Purchase Process

#### 3.1. Customers Browse Products

- Step: Customers browse the available products on my Telegram channel.

- Details: Product details, images, and prices are displayed.

#### 3.2. Customers Visit the Store

- Step: Customers visit my store or any of the branch stores to make their purchases.

### 4. QR Code Scanning at Store

#### 4.1. QR Code Presentation

- Step: At the store, customers present the QR code they received from their agent.

#### 4.2. QR Code Scanning

- Step: I or the other branch store seller opens the app and uses the built-in QR code scanner to scan the presented QR code.

- Details: The app verifies the QR code’s authenticity and fetches the agent's username linked to it.

#### 4.3. Display Customer Information Form

- Step: After successful QR code verification, a form is displayed in the app to enter the customer's information (name, phone number, product name, and price), as well as the store location.

- Details: This information can be typed in a field that allows up to 100 letters.

### 5. Notification to Agent and Me

#### 5.1. Send Notification

- Step: Upon entering and submitting the customer information, the app sends a notification to both the agent and me.

- Details: The notification includes information about the customer's visit, their purchase, and the branch store where the QR code was scanned.

### 6. Completion of Transaction

#### 6.1. Complete Purchase

- Step: The transaction is completed, and the customer receives the discount associated with the QR code.

- Details: The discount is applied, and the purchase details are recorded in the app.

### 7. Managing Agent and Seller Accounts

#### 7.1. Banning Agents and Sellers

- Step: As an admin, I can ban an agent or a branch store seller from the app if necessary.

- Details: A banned agent’s QR codes are invalidated, and they can no longer generate new QR codes. A banned seller cannot scan QR codes anymore.

### 8. Branch Store Integration

#### 8.1. Authorize Branch Store Sellers

- Step: Branch store sellers download the app and sign up as authorized users.

- Details: I grant them permission to access the QR code scanning feature.

#### 8.2. Branch Store QR Code Scanning

- Step: Branch store sellers scan the QR codes presented by customers at their locations.

- Details: The scanning process is the same as in my main store.

### 9. Security Measures

#### 9.1. Restrict QR Code Scanning

- Step: Ensure that only authorized users (me and branch store sellers) can scan QR codes.

- Details: Implement authentication checks to restrict access to the QR code scanning feature.

#### 9.2. Data Protection

- Step: Secure all personal and transactional data.

- Details: Use encryption and secure storage practices to protect user information.