Project Proposal

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App Name: Harvest

App Description:

Harvest is an app that connects the vendors from the local Farmers Market with the local customers. Customers can browse a vendor's profile and see what the vendor is selling with ratings and reviews of the vendor. Customers can also direct message the vendor and get push notification when a new message comes up. The vendor can mark an item as in stock or out of stock based on availability. Customers are also able to upload photos of their products in the review section and rate the product from 1 to 5. In the dashboard vendors profiles with highest rating will be shown at the top. Customers will get notification if any vendor is giving any discount on product.

Target Audience:

This app is made for General Customers and Small Business owners or local vendors.

1. **General Customers**:
   - View sellers' profile for products and pricings
   - Browse products by category (e.g., fruits, vegetables, diary, baked goods)
   - Get notification about new messages, item availability and product discounts.
   - Can leave review for vendors.
2. **Local vendor:**
   - Can add, edit or remove products with details like name, price, description, category and images.
   - Chat with customers about products, prices and availability
   - Push notification for new items or discounts

Core Features:

1. **User Profiles, vendor Profiles**:
   - **Customer Profiles:** Customers can create, update, and manage their personal profiles, including their contact information, preferences, and order history.
   - **Vendor Profiles:** Vendors can establish business profiles that include store details, contact information, product listings and special promotions.

2. **Search & Filtering:**
   - **Product Categories:** Customers can easily browse products organized into most popular products or categories such as fruits, vegetables, dairy, baked goods etc.
   - **Advanced Filters:** Customers can refine their search based on price range, product ratings, availability, and specific food categories.
   - **Cuisine Discovery:** Customers can explore products from various cuisines of different countries, enhancing their shopping experience.

3. **Direct Messaging:**
   - **Instant Chat:** Customers and vendors can communicate in real time using an integrated chat system powered by Firebase Messaging.
   - **Product Inquiries:** Customers can ask vendors about product details, pricing, and availability directly through chat.
   - **Quick Responses for Vendors:** Vendors can set up auto-replies or quick response templates to handle frequent customer questions efficiently.

4. **Push notification:**
   - **Customer Notifications:** Customers receive real-time alerts for new messages, product availability updates, discounts and important market updates.
   - **Vendor Alerts:** Vendors get notified about customer inquiries, new orders, stock updates and other important business activities.

5. **Product availability:**
   - **Product Management:** Vendors can add, edit, or remove products with details such as name, price, description, category and images.
   - **Stock Updates:** Customers can see real-time product availability.

6. **Ratings and Reviews:**
   - **Customer Feedback System:** Customers can leave reviews and rate vendors based on product quality, pricing and overall service.
   - **Photo Uploads:** Customers can attach images to their reviews to share their experience visually.

Optional Features:

1. **Online payment gateways:**
   - Secure checkout with different payment options (credit/debit cards, mobile wallets).
   - ❖ **Note:** For demo purposes, the checkout system may use a dummy payment gateway to simulate transactions and demonstrate app functionality.

2. **Vendor Dashboard for Sales and Analytics:**
   - Vendors can track total sales, pending and completed orders, and revenue insights. plots and charts of sales performance.

3. **Shopping cart and checkout:**
   - Customers can add products to a cart before checkout. Allowing customers to review orders, apply discounts or loyalty points and finalize purchases.

4. **Navigation map:**
   - **Interactive Store Map:** Vendors can list their store locations on an interactive map that displays the market layout.
   - **Market Slot Booking:** Vendors can reserve store spaces for market days through the map interface.
   - **Color-Coded Availability:** The map visually highlights available and occupied store slots using different colors.
   - **Vendor Discovery:** Customers can find nearby vendors based on their location. Clicking on a store in the map instantly redirects them to the vendor's profile or homepage.

App Flow (Example Use Case):

The app starts with a welcome screen displaying the logo or animations.

1. Sign In / Sign Up:

- **Sign Up:** New users can sign up using their email or Google accounts.
- **Sign In:** Existing users enter their credentials (email and password or google login).
- **Profile Selection (Customer or Vendor):**

- After signing in or signing up, users are prompted to select their profile type: **All Vendors** or **Your Vendors**.
- A user can only choose one profile at first but they can switch profiles later.
- ❖ **Note:** Vendors who sign up for the first time will be guided to provide additional information during setup (business details, store info, product listings etc.).

2. Main Page (Post Sign-In)

- **Customer Profile Flow:**
    - If the user selects **All Vendors**, they are taken to the **Homepage** where they can:
        - Browse products by categories (fruits, vegetables, dairy etc.) from their nearest market or from the recent vendors list.
        - Filter products by price range, ratings, availability etc.
        - View and manage their profile (name, contact info, order history etc.).
        - Browse vendors, leave reviews and contact vendors.
        - Receive push notifications for new products, stock updates or discounts.

- **Vendor Profile Flow (New Vendor Setup):**
    - If the user selects **Your Vendors**, they are guided through the **Vendor Profile Setup**:
        - **Basic Information:** Enter business name, store address, contact information, and a brief description of the store.
        - **Product Listings:** Add products by name, price, description, images and category. Categories may be already defined, or user can add their custom categories.
        - **Store Setup:** Choose the market day and slot booking, and upload store layout.
        - Once the vendor setup is complete, they are directed to their **Vendor Dashboard**.

3. Vendor Dashboard (Post Vendor Setup)

- **Vendor Features:**
  - **Product Management:** Add, edit, or remove products, with the ability to update prices, descriptions and availability.
  - **Sales and Analytics:** View sales performance through charts and graphs. Track completed orders, pending orders and revenue insights.
  - **Order Management:** View incoming orders, and process customer queries via the integrated chat system.
  - **Notifications:** Receive alerts for new orders, customer messages and review updates.

4. Product Browsing & Checkout (Customers)

- **Product Browsing:** Customers browse products, add them to their cart, apply filters and discover various categories or cuisines.

- **Shopping Cart:** The customer can review items in their cart, apply discounts, loyalty points and finalize their order. Customers will use a dummy payment system to simulate successful checkout process for demo purposes.

- **Order Confirmation:** After completing the checkout, customers receive a confirmation notification and an order summary.

5. Logout

- Users can log out from their profile at any time, which will return them to the sign-in screen. When users sign in again, the app remembers where they left off and brings them back to their previous session.
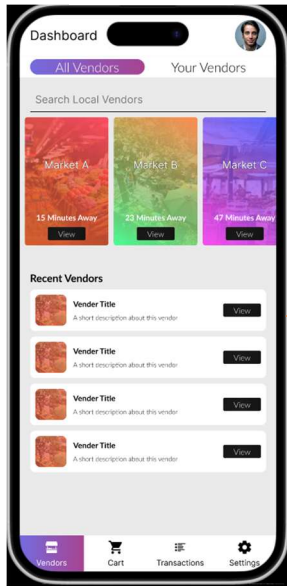

Tech Stack:

- UI Development: Flutter, Flutter firebase_ui_auth
- User Management: FirebaseAuth
- Database: Firestore
- Image Storage: Firebase Cloud Storage
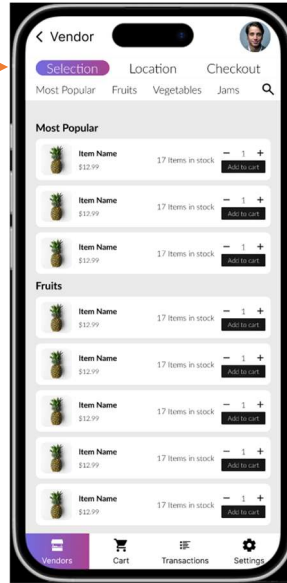- Messaging: Firebase Cloud Messaging, Functions
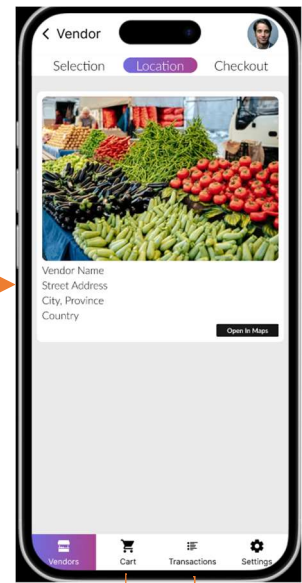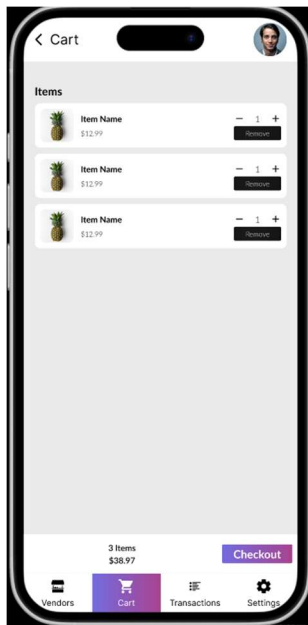
Wireframes:
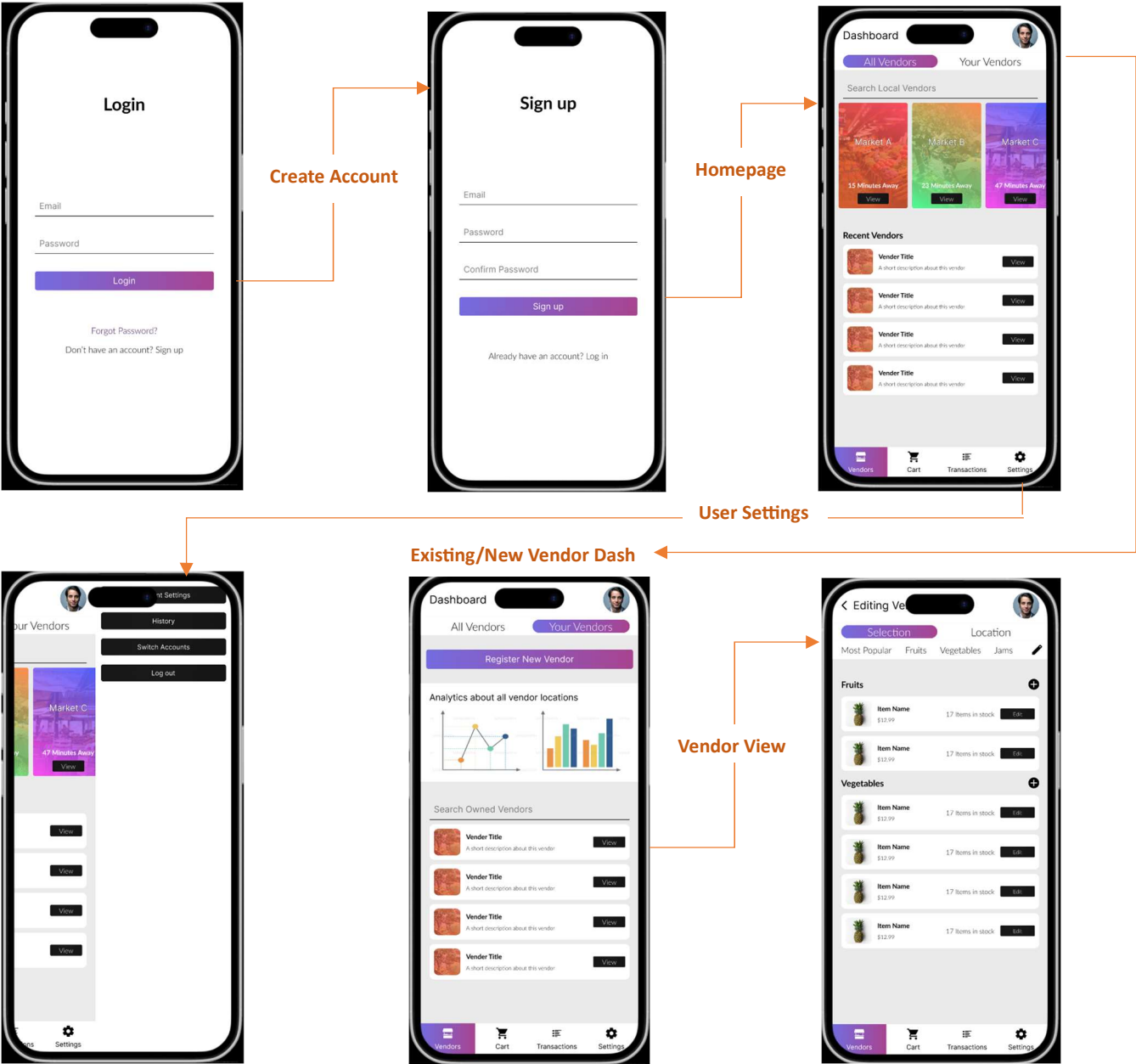
Homepage

Search item

Details

Manage Cart

Payment

Dashboard

All Vendors | Your Vendors

Search Local Vendors

Market A — 15 Minutes Away — View
Market B — 23 Minutes Away — View
Market C — 47 Minutes Away — View

Recent Vendors

Vender Title — A short description about this vendor — View
Vender Title — A short description about this vendor — View
Vender Title — A short description about this vendor — View
Vender Title — A short description about this vendor — View

Vendors | Cart | Transactions | Settings

< Vendor

Selection | Location | Checkout

Most Popular | Fruits | Vegetables | Jams

Most Popular

Item Name — $12.99 — 17 Items in stock — Add to cart — 1
Item Name — $12.99 — 17 Items in stock — Add to cart — 1
Item Name — $12.99 — 17 Items in stock — Add to cart — 1

Fruits

Item Name — $12.99 — 17 Items in stock — Add to cart — 1
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Vendors | Cart | Transactions | Settings

< Vendor

Selection | Location | Checkout

Vendor Name
Street Address
City, Province
Country

Open In Maps

Vendors | Cart | Transactions | Settings

< Cart

Items

Item Name — $12.99 — 1 — Remove
Item Name — $12.99 — 1 — Remove
Item Name — $12.99 — 1 — Remove

3 Items
$38.97 — Checkout

Vendors | Cart | Transactions | Settings

< Vendor

Selection | Location | Checkout

Item Summary

1x Item Name — $12.99
1x Item Name — $12.99
1x Item Name — $12.99
Subtotal — $38.97
GST — 15%
Total — $44.82

Edit Cart

Checkout

Payment Method — Card ending in 1234 — Change
Pickup Address — Open In Maps
Street Address
City, Province
Country
Pickup Time — In 45 minutes.
Total — $44.82

Purchase

Vendors | Cart | Transactions | Settings