Online Grocery & Food Store Order and Delivery

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1 INTRODUCTION

1.1 Stakeholders

- Frontend side Stakeholders:
    - Customer – A Customer who will be able to search grocery items on the platform listed by various store owners and can order them online and get delivered at home through the platform. Customer can order from one store at a time i.e. the Cart will have items from one store only.
    - Grocery Store Owner – A grocery store owner can list grocery products on the platform, get orders from the customers and get delivered them to customers place through platform's delivery personals or through delivery person of himself.
    - Delivery Personal – A delivery person will receive delivery orders from the platform and will deliver order to customer's place.
    - Restaurant owner – The Restaurant owner will be able to post a restaurant on the platform
- Backend side Stakeholders:
    - Admin – The admin who will be able to manage the site from the admin panel and CMS pages as well.

1.2 Revenue Model

- Admin will be earning money through this platform with below mentioned source of revenue –
    - Delivery fee (From Customer) – Admin will take Delivery fee from the Customer
    - Commission – Admin will earn commission for each order from Restaurant Owner and the admin (%) will be managed from admin panel

1.3 Payment Flow

- Customer will pay order amount online and it will go to admin account. The Vendor and the Delivery person will receive the amount offline from the admin
- Customer can pay for the order via wallet/debit/credit card. The Customer will be able to deposit and withdraw amount from wallet

2 Functional Requirements

2.1 Customer Side – Front Side Functional Requirements

- Front side functional requirements are as following –

2.1.1 Sign up (For Customers)

- **Sign up via email:** It will have details as following –
  - o The customer will be able to sign up on the platform by filling the required details mentioned in the sign-up form. The details like Name, e-mail id, mobile number, password, show password and create an account.
  - o By clicking on 'create an account' the verification e-mail will be sent to the customer on his/her mentioned email id. There will be a verification link, by clicking on the link, email ID will be verified and the customer will be redirected to the login page of the platform.

2.1.2 Login

- **Sign up via email:** It will contain following details –
  - o The user needs to enter the e-mail id and password for login on the platform.
  - o Remember Me:
    - ▪ By clicking on remember me the credentials will be stored in the browser cache
  - o Forgot Password:
    - ▪ By clicking on forgot password the user need to enter e-mail id and click on reset password. The password will be sent to the user in mentioned e-mail id.

2.1.3 Homepage

- It will contain following details –
  - o Banner Image –There will be a banner image on the homepage which will be managed by the admin only.
  - o Search Panel (Food Restaurants)
    - ▪ Location – The user can edit the location from this section. The search result will appear according to the entered location. This will be entered first. The Google Maps API will be integrated for the same.
    - ▪ Search by keyword – Then the user can search by keyword. According to the keyword the user will be able to view the search result of restaurants in the 'search result page'
    - ▪ Browse by Cuisine type – Customer will be able to select Cuisine type from this section. According to the Cuisine type the user will be able to view the search result of restaurants in the 'search result page'
  - o Featured Items Panel – It will have list of featured items with details like, Item name, Image, Price/Quantity, Store Name and view more items button. By selecting any item, user will be redirected to that Restaurant detail Page.
  - o Stores in your area – Using Geo-location of user, stores in that particular area will be shown in this panel with detail like, Store Name, Store Address, Store (Open/Closed now), Store review, Free Delivery (Yes/No), view more stores option. By selecting any stores, user will be redirected to store detail page. Map view of these stores will also be shown which shown the stores pinpointed on the map

2.1.4 Search for Restaurants

2.1.4.1 Search result

- The Search result will have the following details
    - Location – The user can edit the location from this section. The search result will appear according to the entered location. This must be entered first.
    - Search by keyword – Then the user can search by keyword. According to the keyword the user will be able to view the search result of restaurants in the 'search result page'
    - Browse by Cuisine type – Customer will be able to select Cuisine type from this section. According to the Cuisine type the user will be able to view the search result of restaurants in the 'search result page'
    - Search result – The Restaurant list will appear according to the entered location. This will consist of the Restaurant name, Restaurant logo, Location and restaurant average rating (out of five). By clicking on this the user will be redirected to the 'Restaurant detail screen'
    - Algorithm – The nearest restaurant will be displayed on the top followed by the highest rating.
    - Sort by – The highest to lowest rating, Price (low to high, High to low)

2.1.4.2 Restaurant Detail screen

- The following will be the details in this section:
    - Restaurant name
    - Restaurant logo
    - Restaurant location
    - Open / Closed – If the status is 'Open' then only the user can order from this restaurant
    - Menu
        - Dish name
            - Cuisine name
            - Cuisine type
            - Cuisine description
            - Price
            - Add to cart – By clicking on this the order will be 'added to cart.'

2.1.5 Cart

- The Customer can order from more than one restaurant.
    - Restaurant name
    - Cuisine name
    - Price
    - Quantity
    - Cuisine price
    - Order fee – This will be displayed according to the city entered by the Restaurant. The city price will be set by the admin
    - Delivery fee – This will be set by the admin
    - Select Delivery address – The customer can either enter the delivery address or select from the ones which he has already listed.
    - Total amount – The user will have to make the payment online and order. To make the payment the user will be redirected to the 'Payment gateway' page. The user will be redirected to the Live tracking screen.

2.1.6 Tracking screen

- System will optimize the stores / Restaurant based on highest value (amount) and drivers who are near to that store would receive the delivery request one by one, one who accepts the request would get to deliver the food and he/she will have to pick-up the orders from the store in the order. When Customer clicks on the track trip button he/she will be redirected to map location. With the help of Google maps API and Geo-Location API, Customer will be able to view the live tracking of the Delivery person. This will also show the details of the order status (Confirmed / Order in making / Order picked up/ Delivered / Cancelled). Delivery person's name, Delivery person's location and the Delivery person's contact number. Customer can cancel the order before and after the Order goes into making. If the Customer cancels the order before the 'order goes into making' then cancellation charges will not be applicable else it will be applicable.

2.1.7 Dashboard for Customer

- The dashboard of the customer contains details like –
  - Customer Profile
    - Customer Name
    - Customer Profile Image
    - Mobile Number
    - Gender
    - Email ID
    - Edit details
  - **Manage Order**
    - Active orders – The orders will have the details as Search by keyword, Restaurant Name, Restaurant Address, Dish Name, Cuisine Type, Quantity, Order Status *(Delivery order: Confirm / Order in making / Order picked up by the Delivery person/ Delivered. The one who accepts, his/her GPS location will be tracked.* Delivery person Name, Delivery person Contact Number, Selected delivery Location with address and Total Amount. The Delivery person name, Delivery person contact number will be visible only after the Delivery person has accepted the request. Go to tracking screen button will also be visible in this section. Give rating (out of five) to the restaurant owner
    - Completed orders – The orders will have the details as Search by keyword, Order id, Customer Name, Customer Address, Customer Contact Number, Delivery person Name, Delivery person Contact Number, Selected delivery Location with address, Dish Name, Cuisine Type, Quantity and Total Amount
  - Transaction and Financial Info –
    - Order ID, Order Date, Order amount, order status, Store owner Name, and Delivery status will be shown here.
  - My Wallet –
    - Total available amount
    - Request for redemption amount
    - Redemption History
    - Send Redeem Request
    - Deposit History
    - Deposit amount now – by clicking on it, user will be redirected to payment gateway page.
  - Notification – When the restaurant confirms the order, when order in making, when order is picked up, when order is delivered

- o Account Settings – The user will be able to manage the below mentioned information in account settings –
  - Notification settings
  - Change Password – The user will have facility to change his/her password by providing below mentioned information –
    - ✓ Enter current password*
    - ✓ Enter new password*
    - ✓ Reenter new password*
    - ✓ Change Password – By clicking on "change password" option, password will get changed and by clicking on "cancel", user will be redirected to "Account Setting".
- o Logout – By clicking on this, user will be logged out of the site.

2.2 Delivery Personal's Side – Front Side Functional Requirements

2.2.1 Sign Up (For Delivery Personal)

- **Sign up via Email:** It will contain details as following –
  - o The Delivery Person will be able to sign up on the platform by filling the required details mentioned in the sign-up form.
  - o The details like Delivery Person Name, e-mail id, mobile number, Vehicle type (which will be used for delivery), vehicle make & model, Vehicle number, ID proof, password, re-enter the password and create an account.
  - o By clicking in on creating an account the verification e-mail also will be sent to the Delivery Person on his/her mentioned email id. There will be verification link, by clicking on link, email ID will be verified.
  - o Admin will also be notified about this new registration and he will verify Delivery Person offline (out of the platform) and after verification, he can accept/reject new registration request. Only after and admin verification and email verification, Delivery Person can login on the platform.

2.2.2 Login

- **Sign in via email:** It will contain following details –
  - o The user needs to enter the e-mail id and password for login on the platform.
  - o Remember Me:
    - By clicking on remember me the credentials will be stored in the browser cache
  - o Forgot Password:
    - By clicking on forgot password the user need to enter e-mail id and click on reset password. The password will be sent to the user in mentioned e-mail id.

2.2.3 Delivery Person Dashboard

- It will contain following details –
  - o Delivery person Profile
    - Name, Image, avg. star rating, uploaded ID proof, e-mail id, mobile number, Vehicle type (which will be used for delivery), vehicle make & model, Vehicle number and edit details option.
  - o Status (online / offline) – The Delivery person can set the status to online / offline. If the status is 'online' then only the Delivery person will receive delivery service notification.
  - o Home Screen

- Food delivery request – The Delivery person will be able to see the request from the nearest Restaurant for the delivery. When a Delivery person doesn't want to get request notification from the Restaurant, he/she can switch the status to 'offline'. The Delivery request will consists of the Restaurant name, Restaurant location (pick-up), Customer location (drop-location), Dish name and Food Quantity with Accept / Reject button. If the Request is accepted then the request will be visible in 'Active orders'. There will be time counter for the Delivery person to accept the request. The counter time will be managed by the admin. Once Delivery person accepts the request he/she will get more details about the ride i.e. the order details, its amount, Customer name and mobile number.
- Manage delivery requests for Food
    - Active orders – The orders will have the details as Search by keyword, Order id, Restaurant Name, Restaurant Address, Dish Name, Cuisine Type, Quantity, Order Status *(Delivery order: Order in making / Order picked up by the Delivery person/ Delivered. The one who accepts, his/her GPS location will be tracked.* Delivery person Name, Delivery person Contact Number and Total Amount. The Delivery person name, Delivery person contact number will be visible only after the Delivery person has accepted the request. Go to tracking screen button will also be visible in this section. There will also be a 'Delivered' button.
    - Completed orders – The orders will have the details as Search by keyword, Customer Name, Customer Address, Customer Contact Number, Restaurant name, Restaurant address, Dish Name, Cuisine Type, Quantity and Total Amount
- My Orders
    - Complete details of customer along with delivery address
    - Details of store owner along with store address will be shown
    - Order details with no. of items and product
    - Navigation (tracking) – on google map navigation will be shown to the delivery person for both the location (pick up and drop). Best suggested route by google map will be shown.
    - Update Status
        - ✓ Dispatched – This status will be updated by delivery personal manually when he picks up order from the store, and will be shown in customer side and store owner.
        - ✓ Delivered – This status will be updated by delivery personal manually, and will be shown in customer side and store owner.
- My reviews and ratings – received reviews and star ratings from customer and store owner will be shown here.
    - Customer Name, profile Image, Order Date, Order amount, Received star rating, review description, review date & time
    - Store owner name, profile Image, Order Date, Order amount, Received star rating, review description, review date & time
- Account Settings – The user will be able to manage the below mentioned information in account settings –
    - Notification – when the order is received.
    - Change Password – The user will have facility to change his/her password by providing below mentioned information –
        - ✓ Enter current password*

✓ Enter new password*
✓ Reenter new password*
✓ Change Password – By clicking on "change password" option, password will get changed and by clicking on "cancel", user will be redirected to "Account Setting".
o Logout – By clicking on this, user will be logged out of the site.

2.2.4 Tracking Screen

- Once the order is picked up the, Customer gets notified on the tracking screen, by what time the Delivery person will arrive using of google map API. With the using of google map API Delivery person will have an ideal path on the screen to reach the Customer's location. Once the Delivery person delivers the order the mentioned drop location then the Delivery person will be able to click on the 'Delivered' button. The status of the order will be updated at the Restaurant and Customer side.

2.3 Restaurant Owner

2.3.1 Sign up

- The Restaurant owner will be able to sign in to the side. Only one Restaurant details can be posted by one Restaurant owner:
  o Enter Restaurant Name
  o Enter Email Address
  o Enter Restaurant Address-City, State, Country, Postal code-Google search suggest API will be integrated
  o Restaurant Contact Number
  o Enter Password
  o Retype Password
  o Submit – By clicking on this the details will be passed on to the admin and a thank you mail will be sent to the user. The admin will be activate the restaurant owner's account from the admin panel.

2.3.2 Login

- If a user already has an account then he/she can enter the credentials as email id and password. If the credentials are incorrect, users will be redirected to log in page and a message will be displayed that, username or password is not valid.
- Remember me – User can also select "remember me" which will save the user credentials in website to remember the user again when he/she logs in.
- Forgot password – User can click on this link if they have forgotten their password. Clicking on this link a pop up a box will appear which will ask a user to provide the email address that they used for signing up. If the email address matches the one in the database, user will get a new password on their email address which they can use for further logins or change it from account settings

2.3.3 Restaurant Dashboard

- The following will be the details in this section:

- **Profile** – The Restaurant Name, Owner's Name, Restaurant photo, Restaurant Address (City, State, Country), Location from google search suggest API, Restaurant Contact Number, Delivery postal code areas, Edit Details
- **Restaurant status (Open / Closed)** – This status will be managed by the restaurant owner and the same will reflect in the Customer's application. For example, if the status is set "Closed" by the owner, it will show "Closed Now" to the customer. If 'closed now' status, the restaurant will not receive any orders
- **Menu Management**
  - Search by keyword, Dish Name, Add a New Dish, Remove a Dish. Restaurant owner can add a new cuisine in the Dish in the platform
- **Manage Orders**
  - Active orders – The orders will have the details as Search by keyword, Customer Name, Customer Address, Customer Contact Number, Dish Name, Cuisine Type, Quantity, Select order status (Confirm, Order in making and order picked up), Order Status *(Confirm / Order in making / Order picked up by the Delivery person/ Delivered / Cancelled. These status except 'delivered' will be managed by restaurant owner. As soon as the 'order is in making' a request is sent to the nearby Delivery person's app. The one who accepts, his/her GPS location will be tracked),* Delivery person Name, Delivery person Contact Number and Total Amount. The Delivery person name, Delivery person contact number will be visible only after the nearby Delivery person has accepted the request.
  - Completed orders – The orders will have the details as Search by keyword, Order id, Customer Name, Customer Address, Customer Contact Number, Delivery person Name, Delivery person Contact Number, Dish Name, Cuisine Type, Quantity, Status (delivered) and Total Amount
- **Received rating** – The Customer name, order id, order date, Star rating (out of five).
- **Wallet** – This section will show the Total earned amount, receivable amount and redeem the earned amount
- **Notification** – Received an order, Received rating, Customer cancelled the order
- **Account setting** – The user will be able to change password and manage notification.
- **Logout**

2.3.3.1 Add a Dish

- The following will be the details in this section:
  - Enter Dish name
  - Add Cuisine
    - Enter Cuisine name
    - Select Cuisine type
    - Enter Cuisine description
    - Enter Cuisine price
    - Remove added Cuisine
  - Save Dish
  - Cancel

2.4 Admin – Backend Side Specification

- The backend side specification contains details as following –

2.4.1 General

- **Site Settings**: - Admin will be able to view and edit site settings, Admin name, Admin Email, SMTP settings, Count down time and Payment gateway
- **Change Password**: - Admin will be able to change password by entering Old password, New password and confirm new password
- **Manage Static Pages: -** Admin will be able to manage different static pages that will be displayed in the website. Admin can (Add new static page, view static page details, edit static page details, delete static page and make the status of any static page as activate/deactivate)

2.4.2 User Management

- **Manage Customers –** Admin will be able to manage users from user management section. Admin will be able to view user details, edit user details, delete user and make the status of user as activate/deactivate.
- **Manage Delivery Person:** With edit, view, delete and activate / deactivate the status. Also the admin will have to verify the user from this section.
- **Manage Restaurant**: Admin will be able to view and delete the restaurant users. Restaurant name, Restaurant logo will be displayed. Admin will also be able to accept/reject restaurant owner platform joining request

2.4.3 Manage Fees

- Delivery person charges (per order delivery) – admin can set Delivery person charges (per order delivery) from here.
- Minimum Cart Value for Free Delivery
- Featured product fee for the products category added by the store owner.

2.4.4 Vehicle Type Management

- **Manage Vehicle Type** – Admin will be able to manage Vehicle Type from this section. Admin will be able to view Vehicle Type details, edit Vehicle Type details, delete Vehicle Type and make the status of Vehicle Type as activate/deactivate.

2.4.5 Vehicle Make and Model Management

- **Manage Vehicle Make & Model** – Admin will be able to manage Vehicle Make & Model from this section. Admin will be able to view Vehicle Make & Model details, edit Vehicle Make & Model details, delete Vehicle Make & Model and make the status of Vehicle Make & Model as activate/deactivate.

2.4.6 Manage Cuisine type

- **Manage Cuisines type –** The admin will be able to add, edit, view and delete the cuisine type.

2.4.7 Contact Us Management

- **Manage Contact Us –** The admin can manage the messages from user from this section. Admin can view the user messages, send replies through email, and delete messages of the users from this section.

2.4.8 View Orders

- **Manage Food Orders –** The admin will be able to view the customer details, Restaurant details and the Partner Driver details along with the order status (Confirmed / Order in making / On the way / Delivered

/ Cancelled). The admin will refund the amount to the customer in case of the order is cancelled. If the order was cancelled after the order went into making then the cancellation charges will be applicable.

2.4.9   View Payments

- **View Received Payments** – Admin can have details of received payment from this section like, Transaction ID, Transaction date, Payment type, Amount. Admin can View/delete records from here

2.4.10 Manage Redeem Request

- **Manage Redemption Requests (From Customer and Restaurant)** – Admin can manage redemption request from this section. It will have following details like, Requester name, Requested amount, Request date, Status-paid/unpaid, Pay to user. Admin can view request details and delete request as well from this section

2.4.11 Manage Slider images

- Admin can add, view, edit and delete the images added in slider panel. Admin will have facility to make status of any image as activate/deactivate

2.4.12 Manage Email Templates

- Admin will be able to manage Email templates from this section. Admin will be able to view Email template details and edit Email template details from this section

3 Non-Functional Requirements

3.1 General Non-Functional Requirements

- This section includes all the non-functional attributes for the proposed project as in terms of the 3rd party API Integration and Common features

3.2 List of Other 3rd Party API's

- This attribute includes a list of all the 3rd party APIs to get the seamless support from the multiple platforms in a single solution
  - Google Maps API (for navigation and pin-pointing locations of the stores on the map)
  - Geo-Location API
  - Payment Gateway to be decided later on during development

  Remark: Feasibility of this API will be dependent upon the services and facilities provided by them

3.3 Other Common Features

- This website will have common features such as
  - CAPTCHA – In the registration form
  - Error Handling
  - SQL Injection Proof Coding Structure
  - Rich Text CKEditor
  - Database Indexing
  - Social Media Panel