



Project Scope

VENTUREPAY LIMITED

Venturepay Limited

Table of Contents

1. User Application	2
1.1 Registration	2
1.2 OTP Verification.....	2
1.3 Profile Section (Incomplete and Complete)	2
1.4 Notifications	5
1.5 Profile Information	5
1.6 Log in Session	5
1.7 Choosing the Default Account	6
1.8 Scanning the QR Code.....	6
1.9 Payment Initiation Process and Final Review Section	6
2.0 Confirmation/Declined Information	7
2. Merchant Application.....	8
2.1 Merchant Application Registration	8
2.2 Merchant Login Process.....	8
2.2 Transaction Process.....	9
2.3 Transaction Receipt and Notification for Merchants	10
Merchant Home Page	10
2.4 Viewing Transactional Data	10
2.5 Adding Staff	11
2.6 Adding a Tip	13

1. User Application

2. Merchant Application and

3. An Admin Dashboard

In this section, we will just write about the application.

Features and Client Requirements

Application	Feature Code	Feature Description
User	FTR-001	Registration - Mobile Number Input
	FTR-002	Registration - Email Address Input
	FTR-003	Registration - Password Input
	FTR-004	Registration - Confirm Password Input
	FTR-005	Registration - User Terms and Conditions Tick Box
	FTR-006	Registration - Marketing Promotional Subscription Tick Box
	FTR-007	Registration - Submit and Continue Button
	FTR-008	OTP Verification - OTP sent to Mobile
	FTR-009	OTP Verification - Option for OTP via Email
	FTR-010	Profile Section - Incomplete - Payment History (Inactive)
	FTR-011	Profile Section - Incomplete - Displaying User Accounts (Inactive)
	FTR-012	Profile Section - Incomplete - Refer and Earn (Inactive)
	FTR-013	Profile Section - Incomplete - Customer Support (Inactive)
	FTR-014	Profile Section - Incomplete - Make Payment (Inactive)
	FTR-015	Profile Section - Incomplete - FAQs (Active)
	FTR-016	Profile Section - Incomplete - Carousel Ads (Active)
	FTR-017	Profile Section - Complete - Payment History (Active)
	FTR-018	Profile Section - Complete - Displaying User Accounts (Active)
	FTR-019	Profile Section - Complete - Refer and Earn (Active)
	FTR-020	Profile Section - Complete - Customer Support (Active)

FTR-021	Profile Section - Complete - Make Payment (Active)
FTR-022	Profile Section - Complete - FAQs (Active)
FTR-023	Profile Section - Complete - Carousel Ads (Active)
FTR-024	Profile Section - Complete - Supported Bank Logos (Active)
FTR-025	Notifications - Transaction Confirmations
FTR-026	Notifications - Promotional News or Updates
FTR-027	Notifications - Account Updates or Changes
FTR-028	Profile Information - My Account (Editable, Verification Required)
FTR-029	Profile Information - My Profile (Editable, Password Required for Removal)
FTR-030	Profile Information - Change Password (Editable, Verification Required)
FTR-031	Profile Information - About Venturepay (Non-Editable)
FTR-032	Profile Information - Refer a Friend (Non-Editable)
FTR-033	Profile Information - Log Out (Non-Editable)
FTR-034	Log in Session - Username
FTR-035	Log in Session - Password
FTR-036	Log in Session - Forgot Password
FTR-037	Log in Session - Sign in
FTR-038	Log in Session - Create an Account
FTR-039	Choosing the Default Account - View Existing Payment Methods
FTR-040	Choosing the Default Account - Set Default Payment Method
FTR-041	Choosing the Default Account - Confirmation Step
FTR-042	Choosing the Default Account - Success Notification
FTR-043	Scanning the QR Code - QR Code Scanning
FTR-044	Scanning the QR Code - Error Handling
FTR-045	Scanning the QR Code - Security Measures
FTR-046	Payment Initiation Process and Final Review Section - Payee Name (Non-Editable)

	FTR-047	Payment Initiation Process and Final Review Section - Payee Accounts Partial Details (Non-Editable)
	FTR-048	Payment Initiation Process and Final Review Section - Transaction Date and Time (Non-Editable)
	FTR-049	Payment Initiation Process and Final Review Section - Amount to Pay (Non-Editable)
	FTR-050	Confirmation/Declined Information - Redirect to Banking App
	FTR-051	Confirmation/Declined Information - Payment Confirmation or Decline
Merchant	FTR-052	Merchant Application Registration - Document Verification
	FTR-053	Merchant Application Registration - Registration Review
	FTR-054	Merchant Application Registration - Profile Creation
	FTR-055	Merchant Application Registration - Credential Generation
	FTR-056	Merchant Application Registration - Merchant Notification
	FTR-057	Merchant Application Registration - Profile Completion
	FTR-058	Merchant Application Registration - Verification Status
	FTR-059	Merchant Login Process - UserID
	FTR-060	Merchant Login Process - Password
	FTR-061	Merchant Login Process - Forgot Password
	FTR-062	Merchant Login Process - Sign in
	FTR-063	Merchant Login Process - Account Lock
	FTR-064	Merchant Login Process - Security Measures
	FTR-065	Transaction Process - Amount Entry Screen
	FTR-066	Transaction Process - QR Code Generation
	FTR-067	Transaction Process - Real-Time Transaction Processing
	FTR-068	Transaction Process - Security Measures
	FTR-069	Transaction Receipt and Notification for Merchants - Transaction Receipt Generation
	FTR-070	Transaction Receipt and Notification for Merchants - Viewing the Receipt

	FTR-071	Transaction Receipt and Notification for Merchants - Push Notifications
	FTR-072	Transaction Receipt and Notification for Merchants - Accessibility and Security
	FTR-073	Viewing Transactional Data - Viewing Account Balance
	FTR-074	Viewing Transactional Data - Daily Sales Amount
	FTR-075	Viewing Transactional Data - Transaction History & Tracking
	FTR-076	Viewing Transactional Data - Transaction Details
	FTR-077	Viewing Transactional Data - Security and Privacy
	FTR-078	Adding Staff - Adding Staff Members
	FTR-079	Adding Staff - User Credentials for Staff Account
	FTR-080	Adding Staff - Staff Account Access Control
	FTR-081	Adding Staff - Viewing Restrictions
	FTR-082	Adding Staff - Security and Authentication
	FTR-083	Adding Staff - Removing Staff Account
	FTR-084	Adding a Tip - Enabling Tip Section
	FTR-085	Adding a Tip - Tips by Percentage
	FTR-086	Adding a Tip - Tips by Direct Amount
	FTR-087	Adding a Tip - Displaying Tip on the Screen
	FTR-088	Adding a Tip - Calculating the Final Payment After the Tip
	FTR-089	Adding a Tip - Transaction Finalization
User and Merchant	FTR-090	Live Chat Support - Live Chat Integration
	FTR-091	Live Chat Support - Issue Priority and Recording
Admin Dashboard	FTR-092	Provide Necessary Details
	FTR-093	Document Verification
	FTR-094	Email Notification to Merchant
	FTR-095	Confirmation Step
	FTR-096	Email Notification to Merchant

	FTR-097	Filter by Date, Amount, User, Merchant
	FTR-098	Export to CSV or Excel
	FTR-099	Assign Different Role
	FTR-100	Notification to Users
	FTR-101	Modify Roles and Access Levels
	FTR-102	Confirmation Step
	FTR-103	Notification to Users
	FTR-104	View and Manage Login Details
	FTR-105	Password Reset Option
	FTR-106	Enable/Disable Admin Accounts

1. User Application

Venturepay's user application is designed to take the payment from any QR Code that is generated by any of the business account from Venturepay. The process for the application design and development is given below.

1.1 Registration

The application registration section will have the following pages -

Required Field	Input Type
Mobile Number	User Input
Email Address	User Input
Password	User Input
Confirm Password	User Input
User Terms and Conditions	Tick box
Marketing Promotional Subscription	Tick Box
Submit and continue	Action Button

1.2 OTP Verification

After completing the process in 1.1, the user will be redirecting to OTP verification and the code will be send by default to the user's mobile number.

Using alternative method:

Alternatively, user can decide if they want the OTP Verification on their email.

1.3 Profile Section (Incomplete and Complete)

Incomplete Section:

At the very beginning after the registration process, once user will complete the process mentioned in 1.2, they will be redirecting to the profile section where the following options can be seen –

Options	Description	Status
Payment History	Where the user can view all the transaction history	Inactive
Displaying user accounts	Display the accounts the user connected from their internet banking ap	Inactive
Refer and earn	Refer a person to download venturepay so that they can get discounts on N number of payments	Inactive
Customer Support	Setting up a quick call with the customer service support team	Inactive
Make Payment	Scanning QR Code to make payments	Inactive
FAQ's	Frequently Asked Questions	Active
Carousel Ads	Promotional Advertisements	Active

Completing The Profile

While the user finds the profile incomplete, the user needs to set up their account to complete their profile by the following process –

1. Profile Setup – Page 1

In this following section, the user will find the following fields to complete page 1 and moving on to page 2.

Required Field	Input Type
User ID	Default (The User ID format is discussed below, Read Understanding User ID)
Title	Dropdown (The details of dropdown can be found below)
First Name	Input Field
Last Name	Input Field
Email	Input Field (Required if they left it blank during Registration)
Date of Birth	Default Calendar
Postcode	The Address Finder API will be given by Venturepay Ltd.
Address	Autofill from Postcode
City	Autofill from Postcode

Understanding User ID:

The user ID will be following the given format –

VPXXXXXXXX

To be more precise, the first Six Digits will be counting the last two digits of the year, the month and date the user wish to open the account. Here is a following example which is VP**231210**XX

The last two digits counts the number of the user registering themselves with Venturepay, for example, if the user is 10th of the user registering this app on the following date, the userID will be “**VP23121010**”

Titles on the page 1:

In the United Kingdom, individuals may hold various titles, depending on their status and achievements. Here are some common titles and honorifics that can be used with British names.

1. Mr.

2. Mrs.
3. Miss
4. Ms.
5. Dr.
6. Professor
7. Sir
8. Dame
9. Lord
10. Lady

2. **Selecting your Bank**

After finishing the page 1 section, the journey will take the user to selecting their bank, the user then authenticates their chosen online banking app with Venturepay app to confirm consents and the following permission –

"ReadAccountsDetail",

"ReadBalances",

"ReadTransactionsCredits",

"ReadTransactionsDebits",

"ReadTransactionsDetail"

Once the bank is being integrated, the user will move on to the next screen after the confirmation pop up where they can see the following mentioned in **Review and Finish Setup** Option.

3. **Review and Finish Setup**

In This section, before finishing the profile setup process, the user can review the process of what they have completed earlier on section 1 and 2 in the profile setup process –

Required Field	Input Type
Selected Bank	Default
User ID	Default
Title	Default
First Name	Default
Last Name	Default
Email	Default
Date of Birth	Default
Postcode	Default
Adress	Default
City	Default

Complete Profile section

After the completion of the registration process, the user than can view and take actions to complete any payment process. The user also can contact the support team if something goes wrong.

Options	Description	Status
Payment History	Where the user can view all the transaction history	Active
Displaying user accounts	Displays the accounts the user connected from their internet banking app	Active
Refer and earn	Refer a person to download venturepay so that they can get discounts on N number of payments	Active
Customer Support	Setting up a quick call with the customer service support team	Active
Make Payment	Scanning QR Code to make payments	Active
FAQ's	Frequently Asked Questions	Active
Carousel Ads	Promotional Advertisements	Active
Supported Bank Logo	Displays the lists of Bank we are associated with	Active

1.4 Notifications

In the profile section, the notifications will be shown on the top right corner.

The notification displays the following –

1. User's transaction confirmations
2. Any promotional news or updates
3. Regarding account updates or changes that has been made occasionally.

1.5 Profile Information

In the navigation drawer associated with user's profile picture, by clicking on it, a drawer on the left-hand side pops up that displays the following-

Options	Description	Editable?	Verification Required?
My Account	<ul style="list-style-type: none"> • Display the user's Connected Bank information. • Allows users to update, create and remove an account. 	Yes	Yes
My Profile	<ul style="list-style-type: none"> • Displays the user's basic information. • Allows users to update their information. • Allows the user to remove their account permanently 	Yes	Password Required if Removing the account
Change Password	Allows user to update their current password	Yes	Yes
About Venturepay	Displays the version of the application	No	No
Refer a Friend	Refer a person to download venturepay so that they can	No	No

	get discounts on N number of payments		
Log Out	Logs Out the user	No	No

1.6 Log in Session

Once the user logs out from the system, the user is required to login using their username and password.

The login session will contain the following.

Options	Description
Username	The UserID which was created during the registration process
Password	The current password on their account
Forgot Password	Takes the user to the OTP Page to create a new password followed by the authentication code
Sign in	Signs the user into the account
Create an Account	If there are no account exists, User can create a new account

Forgetting the username or Password

If the user forgot the username or the password, the user then will be doing an OTP verification process where the user gets the code to modifying them one more time. After the changes, the user then can access into the account after Loggin in with their new credentials.

1.7 Choosing the Default Account

Under "Your Account" section, the user can view a list of their existing payment methods, which may include bank accounts, or other payment options they have previously added to their account. The processes are the following:

- The user selects one of the existing payment methods and chooses an option such as "Set as Default" or "Make Default." This action designates this payment method as the default for future transactions.
- The application may ask for confirmation to ensure that the user intends to set this payment method as the default. This confirmation step helps prevent accidental changes.
- After confirmation, the user receives a success notification, indicating that the default payment method has been updated.
- The chosen payment method is now set as the default for the user's account. This means that for future transactions, such as making purchases or paying subscriptions, this payment method will be automatically selected unless the user chooses a different one during the transaction.

1.8 Scanning the QR Code

A third-party QR Code scanner scans the required QR Code to process in initiation of the payment. This module will be responsible for capturing data embedded in QR Codes. This includes connecting the scanned information to the payment processing system. The system will also notify the user error handling exceptions to address issues that may arise during the

QR Code scanning process, such as invalid QR Codes or connectivity problems. This will also allow to protect user data and payment transactions during and after QR Code scanning.

Please note that, the built in QR Codes for some devices will take the user to the Venturepay application.

1.9 Payment Initiation Process and Final Review Section

While the QR Code scanning process are done, the user then will be redirected to the payment review process screen. This is for the final call before the payment takes place with their default payment section.

The section will display the follows –

Display Items	Description	Editable?
Payee Name	The name of the account the user is paying	No
Payee accounts partial details	The business accounts last 2 digits of its account number	No
Transaction Date and Time	Displays transactions date and the time	No
Amount to Pay	Total amount the user is paying	No

2.0 Confirmation/Declined Information

While the user pays the amount displayed in section 1.9, the user then will be redirect to the online banking app to complete the payment process. The banking app will then process the payment and will send the user back to the app with a confirmation message, that displays if the transaction was successful or not.

2. Merchant Application

2.1 Merchant Application Registration

An essential part of the system that verifies merchants' compliance and allows them to take part in the payment application is the human examination and building of merchant profiles. This scope includes the following essential elements:

Document Verification:

Implementation of a document verification system to assess the authenticity of merchant-provided documents. This process includes reviewing business information on Company House, permits, tax IDs, and any other relevant documents.

Registration Review:

Review of the merchant's registration information, including business name, contact details, and other necessary data. Verification of this information to ensure accuracy.

Profile Creation:

Upon successful document verification and review, the system will create a unique merchant profile. This profile includes details such as business name, address, contact information, and any other relevant data.

Credential Generation:

Generation of login credentials, such as a username and a temporary password, for the approved merchant. The merchant then can download the merchant app and these credentials will grant them access to their merchant account within the application.

Merchant Notification:

Notification to the merchant regarding the successful completion of the application review process and the provision of their login credentials.

Profile Completion:

Instructions and tools for the merchant to complete their profile by adding additional information such as a business logo, product listings, and business description.

Verification Status:

Display of a verification status within the merchant profile, indicating whether the merchant's documents have been successfully reviewed and approved.

2.2 Merchant Login Process

While opening the application, the merchant navigates to the login page within the application. Typically, this is accessible from the main screen or a designated login section unless it's not already logged in.

The login session will contain the following.

Options	Description
UserID	The UserID which was created during the registration process
Password	The current password on their account

Forgot Password	Takes the user to the OTP Page to create a new password followed by the authentication code
Sign in	Signs the user into the account

Forgetting the username or Password

If the user forgot the username or the password, the user then will be doing an OTP verification process where the user gets the code to modifying them one more time. (This typically involves receiving a password reset link via email or SMS). After the changes, the user then can access into the account after Login in with their new credentials.

Account Lock:

To enhance security, the application may have an account lockout policy that temporarily disables an account after multiple failed login attempts. (Max. Number of attempt: 4) This is to prevent unauthorized access attempts.

Security Measures:

The application should employ security measures such as encryption to protect login information and prevent unauthorized access.

2.2 Transaction Process

The transaction process introduces QR Code payment process. The primary objective of the "QR Code Payment" feature is to provide merchants with a user-friendly tool that allows them to create unique Quick Response (QR) codes. These QR codes serve as payment requests, facilitating efficient and contactless transactions.

Amount Entry Screen

Within the merchant application, a dedicated screen or input field is provided for the merchant to type in the desired transaction amount. The interface is designed for ease of use and accuracy separated by the main amount and the tips if added.

The merchant enters the transaction amount manually, inputting the specific numeric value. The system may allow the use of decimal points for precise amounts.

QR Code Generation

After the merchant enters the required amount, the system creates a QR code depending on the numeric number supplied. The transaction amount is clearly represented by this QR code. Both merchant and user can view the total amount under the QR Code section.

If the merchant adjusts the transaction amount manually, the system can update the QR code in real-time to reflect the new amount. This flexibility allows for quick changes and accurate representation of transaction values.

Real Time Transaction Processing:

Customers or other parties can scan the QR code after it has been displayed to begin payments or transactions. The scanned QR code sends the requested amount to their selected open banking account in order to complete the transaction.

Security Measures

Security measures are in place to protect the integrity and confidentiality of the QR code and the associated financial transaction process. Completion of this feature may required authorization and authentication.

2.3 Transaction Receipt and Notification for Merchants

The merchant application includes a feature that sends transaction receipts via email and provides push notifications to merchants. This ensures that merchants receive immediate confirmation and records of each transaction.

Transaction Receipt

A detailed transaction receipt, including of the transaction amount, date and time, payer and payee details, and a transaction reference number, is generated by the system. An official record of the completed transaction is provided by this receipt.

Transaction Receipt Entity	Input type
Date	Date
Time	Date and Time
Transaction Reference Number	String
Total Amount	Float
Payee Name	String

Viewing the Receipt:

The system automatically sends an email receipt to the merchant's registered email address. This email contains the transaction receipt as an attachment or a link to a secure online transaction history. Merchants can access the full transaction receipt by clicking the link in the email or tapping the push notification on their mobile device. The receipt is displayed in the merchant application for their review.

Push Notifications

A push notification is sent to the merchant's mobile device. This notification appears on the merchant's screen, providing a brief summary of the transaction and a link to access the full transaction details.

Accessibility and Security:

To ensure security and confidentiality, both email receipts and push notifications are sent securely and may require authentication for access.

Merchant Home Page

2.4 Viewing Transactional Data

Viewing Account Balance:

The home screen prominently displays the current balance in the merchant's connected open banking account. This balance represents the total funds available in their open banking account, which is connected to the application.

Daily Sales Amount:

A separate section on the home screen presents the daily sales amount. This amount is calculated based on all sales and transactions processed by the merchant during the current day and resets at 00:00 (midnight) every night.

Transaction History & Tracking:

- Merchants can access a real-time transaction dashboard that provides an overview of all ongoing transactions.
- Transaction tracking includes details such as transaction ID, customer information, payment method, and transaction status (e.g., pending, completed, or failed).
- Real-time transaction updates ensure merchants can monitor and respond to transactions effectively.

Transaction Details:

- Merchants can access comprehensive transaction details, including:
 - Transaction date and time.
 - Transaction amount and currency.
 - Customer details (account name/Transaction ID).
 - Payment method used (paid by Venturepay Only).
- The ability to search and filter transactions by specific criteria (e.g., date, customer, amount).

[The detailed page of the transactions will be appeared upon clicking on “View More/ Transaction History” actions]

Security and Privacy:

Security measures are in place to protect sensitive financial data, ensuring that only authorized users can access this information.

2.5 Adding Staff

One essential element of the programme for merchants is the ability to create and manage staff members.

Adding Staff Members:

Merchants can add a maximum of 4 staff members to their account. Staff registration requires the following details for each staff member:

- Full name.

- Store location (if different from the merchant's trading address).
- Email address.
- Mobile phone number.

If the staff member(s) work at the same trading address as the merchant, it is not necessary to enter their store details separately. The system will automatically populate the trading address information for these staff member(s).

User Credentials for staff account

Upon confirmation, the system generates unique usernames and passwords for each staff member. These credentials are used by staff members to access their staff accounts within the application.

Staff Account Access Control

Staff members are provided with limited access within the application. They can:

- Log in to their staff accounts using the generated usernames and passwords.
- Make payments on behalf of the merchant for transactions.
- Verify the status of payments to ensure they have gone through properly.

Viewing Restrictions

Staff members do not have the ability to create or manage their own accounts. Account creation is solely under the control of the merchant.

View Transaction Details	No
View total Sales	No
Take Payment	Yes
Sending receipt if necessary	Yes
View Transactional History	No
Adding/Removing Staff	No
Changing Username/Password	No

Security and Authentication

Strong security measures are implemented to protect staff accounts and data, ensuring that only authorized staff members can access their accounts.

Removing Staff account

Merchants need to have the flexibility to deactivate or remove staff members when necessary. Within the staff management section, merchants can view a list of all the staff members currently associated with their account. Each staff member is listed with their name, store location, and contact details. To remove a staff member, the merchant selects the specific staff

member from the list. The selection involves a toggle button that enables or disables staff account. To remove the staff account, merchant has the access to remove the staff as well.

2.6 Adding a Tip

Merchants may use the application options to customise how they want to handle tips. There are two ways to add tips with this feature: "Tips by Direct Amount" and "Tips by Percentage."

Enabling Tip Section

Within the settings menu, merchants have the option to enable the "Tip Section." This allows them to activate the ability to add tips to transactions. After enabling the tip section, merchants can configure how they'd like to handle tips.

A. Tips by Percentage

Merchants have the option to let customers tip up to a certain percentage of the total purchase price. Customers can specify a custom percentage or choose from established percentages (e.g., 10%, 15%, 20%).

B. Tips by Direct Amount

Alternatively, merchants can opt to allow customers to add a specific tip amount in GBP. This has to be a fixed amount that customers choose themselves.

Displaying Tip on the Screen

When customers make a payment using the application, they are presented with the payment screen. At the end of this screen, there is an option labelled "Add a Tip."

Calculating the final payment after the tip

The application calculates the final payment amount by adding the selected tip to the initial transaction amount. This amount is then presented for confirmation.

For instance:

Sub Total: £99.99 GBP

After adding 5.0% Tip: 4.99

Total : £104.98

Alternatively,

Sub Total: £99.99 GBP

After adding £5.0 Tip: 5.00

Total : £104.99

Transaction Finalisation

After customers have selected or entered a tip amount, they finalize the transaction as usual. The tip is included in the total transaction amount.

Adding Third-Party Live Chat Support for Issue Reporting:

A dedicated "Live Chat Support" section or button is typically available in the application's interface.

The addition of a third-party live chat programme might be a useful tool to improve support and customer service. With this live chat service, customers and merchants may communicate problems and request help.

Live Chat Integration:

The application is integrated with a third-party live chat support service, which provides real-time communication capabilities for merchants and users.

Issue Priority and Recording

Notifications on updates or fixes to the documented issue are sent to both the merchant and the user. Notifications may be obtained by email or push notifications in addition to the live chat interface.
