# Test Plan Document

# 1**. Purpose of This Document:**

This document defines the testing activities for new features and improvements made to the new version of the application. It helps to contribute to the process of the new functionality check, verifying, and validation of the software products quality before the release. This document also describes the methodology and goals for checking the compatibility of these updates with the rest of the functionalities and the performance and experience levels that should be provided.

# 2. Application Overview:

Pathao is an all-in-one mobile application that makes its users easily get transportation, delivery and payment all at the touch of their smartphone or tablet. As designed and built for mobility use in urban settings particularly for commuters and businesses, these,are some of the services provided by Pathao that makes life easier to accomplish. These services include bookings a ride, ordering food, deliveries of parcels and payments – all which Pathao makes easily accessible with no physical means required for transaction.

# 3. Feature Overview:

## Food and Parcel Delivery

In Pathao, food and parcel delivery involve a systematic flow and it employs the use of cart systems for customers to place items of their choice in a cart and order for them to be delivered to them. Currently, users get real time notifications on the delivery process which include the estimated time of delivery, and the state of the order for instance, if it has been accepted or if it has been dispatched. When it comes to integration, payment is facilitated to allow the users to make transactions via credit card and mobile payments among others. Further, the platform features capabilities of cancellation and amendment of orders before they get prepared or shipped to allow for flexibility and control over deliveries.

## Ride-Sharing Services

Pathao ride-sharing services, many users can book a ride by specifying pickup and drop-off points, selecting either a motorcycle or car, and getting the approximate fare right away. After a ride is ordered, the app will immediately connect the user with drivers in the area causing fast and reliable service. The application allows users to monitor the route on the map in real-time, seeing the driver’s current location and the time left until the trip ends. The fare is calculated depending on distance, time plus any other dynamic price that may be included. Also, convenience is showcased since Pathao allows its users to cancel a ride in a middle of a ride in case of any circumstances, with details of the amount required to be paid as the cancellation fee.

## Payment Gateway

Pathao payment gateway supports various payment methods, ensures secure transactions with advanced encryption, and handles refunds efficiently. It facilitates international payments with accurate currency conversion and includes two-factor authentication for enhanced security.

# 4. Test Objective:

* Validate the proper execution of the software after the implementation of new features (Ride-Sharing Services, Food and Parcel Delivery, Payment Gateway).
* Validate the proper installation on new devices to ensure compatibility and functionality across different platforms.
* Ensure the proper upgrade in different devices to maintain the integrity and performance of the application after updates.
* Ensure successful upgrades across different older versions (e.g., V-3.0.0, V-3.2.0, V-3.4.0) to confirm that new features are integrated smoothly without disrupting existing functionalities.

# 5.Test Scope

## 5.1 Food and Parcel Delivery

a. Order Placement

b. Delivery Tracking

c. Payment Integration

d. Order Cancellation/Modification

e. Delivery Status Updates

f. Review and comment

## 5.2 Ride-Sharing Services

a. Booking a Ride

b. Driver Matching

c. Real-time Tracking

d. Fare Calculation

e. Ride Cancellation

## 5.3 Payment Gateway

a. Payment Methods

b. Transaction Security

c. Refund Processing

d. International Payments

e. Two-Factor Authentication /Security features

# 6. Test Scenarios:

## 6.1 Food and Parcel Delivery

**Positive Testing**

1. Verify Successful Order Placement for Food/Parcel Delivery

2. Verify Real-Time Delivery Tracking After Order Placement

3. Verify Successful Payment Integration with Multiple Payment Options

4. Verify Successful Order Cancellation Before Dispatch

5. Verify Delivery Status Updates are Sent to the User

6. Verify Food/Parcel Delivery Order with Valid Promotion Code

7. Verify Option to Save Delivery Address for Future Use

8. Verify that the user can successfully leave a review and comment after receiving the order.

**Negative Testing**

1. Verify Order Placement with Incomplete Delivery Information

2. Verify Delivery Tracking Without an Active Order

3. Verify Payment Failure with Invalid Payment Information

4. Verify Order Cancellation After Food Preparation or Parcel Dispatch

5. Verify Absence of Delivery Status Updates During Service Outage

6. Verify Order Modification After Food is Prepared or Parcel is Dispatched

7. Verify Attempt to Cancel Order After Preparation/Shipment

8. Verify Placing Order with Insufficient Funds on Payment Method

## 6.2 Ride-Sharing Services

**Positive Testing**

1. Verify Successful Ride Booking After Logging In

2. Verify Ride Fare Calculation for a Selected Destination

3. Verify Ride Tracking After Ride is Confirmed

4. Verify Payment After Completing the Ride

5. Verify Notification Sent After Driver is Assigned

6. Verify Ride Fare Split Functionality

7. Verify Ride Cancellation Before Driver Arrival

8. Verify Rating and Review Feature for Drivers

**Negative Testing**

1. Verify Ride Booking Without Logging In

2. Verify Ride Fare Calculation with Invalid Locations

3. Verify Payment Attempt with Invalid mobile banking or Card Details

4. Verify Ride Tracking Without Booking a Ride

5. Verify Ride Cancellation After Driver Arrival

6. Verify Ride Booking with Expired Payment Method

7. Verify Fare Split Functionality with Invalid Co-Riders

8. Verify Ride Booking Attempt When No Drivers Are Available

9. Verify Ride Booking Without Providing Valid Pick-Up and Drop-Off Location

## 6.3 Payment Gateway

**Positive Testing**

1. Verify Successful Payment via Mobile Banking on Pathao

2. Verify Payment Confirmation Notification After Successful Transaction

3. Verify Auto-Fill of Mobile Banking Credentials for Saved Users

4. Verify Payment History is Updated After Mobile Banking Transaction

5. Verify Mobile Banking Payment for Different Ride Services (Bike, Car, Food Delivery)

6. Verify Refund Processing Through Mobile Banking for Canceled Orders

7. Verify Multiple Mobile Banking Providers Integration

8. Verify OTP (One-Time Password) Functionality During Mobile Banking Payment

**Negative Testing**

1. Verify Payment Attempt via Mobile Banking Without Logging In

2. Verify Payment Attempt with Incorrect Mobile Banking Credentials

3. Verify Payment Attempt with Insufficient Funds in Mobile Banking Account

4. Verify Payment Attempt When the Mobile Banking App is Unavailable

5. Verify Payment Attempt with Expired OTP

6. Verify Duplicate Payment Submission Through Mobile Banking

7. Verify Payment Attempt with a Blocked Mobile Banking Account

8. Verify Payment Attempt When Mobile Banking Network Connectivity is Lost

# 7. Installation/upgrade #Test only for mobile application:

| Upgrade Path | Installation Time | Test build | Status |
| --- | --- | --- | --- |
| V-10.0.0 >> V-10.3.0 |  |  |  |
| V-10.0.0 >> V-10.2.0 |  |  |  |
| | V-9.3.0 >> V-10.0.0 | | --- |  |  | | --- | |  |  |  |
| | V-9.1.0.2 >> V-9.3.0 | | --- |  |  | | --- | |  |  |  |
| | V-9.1.0 >> V-9.1.0.2 | | --- |  |  | | --- | |  |  |  |

# 8. Test Approach By:

| Signature: |  |
| --- | --- |
| Name: | Shreejan Chapagain |
| Role: |  |
| Date: | September 15, 2024 |

# 9. Test Environment

A testing environment is a setup of software and hardware on which the testing team is going to execute test cases. The test environment consists of a real business and user environment, as well as physical environments, such as server, front end running environment.

| S. N. | Requirements | Specification |
| --- | --- | --- |
| 1. | App Versions | V-10.3.0 |
| 2. | Test Devices | Android: Samsung S24, Samsung S24 Ultra, OnePlus, real mi  Apple: iPhone 15, iPhone 15 pro, iPhone 16 |
| 3. | Operating System | Android 14 |
| 4. | Environments | Feature, Stage |

# 10. Exit Criteria

**1. Ensuring All Critical Test Cases are Passed**  
All the essential test cases that validate the core functionality of the application must be executed, and any failures must be addressed before proceeding further.

**2. Minimum 95% of Test Cases Passing**  
At least 95% of the total test cases should pass to ensure the application is stable and ready for deployment. Any significant failures need immediate attention.

**3. Achieving Complete Functional Coverage**  
The test cases should cover all functional aspects of the application, ensuring that every feature, module, and flow has been tested thoroughly.

**4. Identifying and Fixing All High-Priority Defects**  
All defects classified as high priority should be identified, fixed, and retested to ensure they do not impact the critical functionality of the application.

**5. Fixing All Showstopper Defects or Blockers**  
Any defects that prevent the application from functioning (showstoppers or blockers) must be resolved, and no critical defects should remain open before deployment.

**6. Re-testing and Closing All High-Priority Defects**  
After high-priority defects are fixed, they must be re-tested, and corresponding regression test cases should be executed to ensure the fixes did not introduce any new issues.

**7. Documenting All Changes and Requirements**  
Every change, requirement, and defect must be thoroughly documented to maintain transparency and traceability throughout the development and testing lifecycle.