

# Kashly

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## Introduction

The system; a mobile application for electronic payments

Intended Audience

- Purpose: Individuals, merchants, employees

Definitions

- Definitions: Digital; an account stores funds, via/ recharge
- OTP: One-Time Password: OTP

### Overall Description

Environment

- Android, IOS
- Secure servers
- API: Integration via with banks/providers

User Characteristics

- User; Transfer money
- Administrator
- Monitor and troubleshoot

Constraints

- Internet connectivity
- OTP for sensitive operations, mandatory encryption

### Functional Requirements

FR1: User Registration

- Enter details; receiving n2 seconds

FR2: Login

- Mobile number and password

FR3: Wallet Top-Up

- Enter card or code

FR4: Money Transfer

- Enter recipient's mobile number and amount

FR5: Bill Payment

- Select bill type, enter details, pay

FR6: Transaction History

### Non-Functional Requirements

NFR1: Performance

- Operation response time  $\geq 2$  s

NFR2: Security

- SSL encryption, OTP for operations
- Protection against attacks

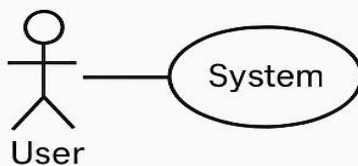
NFR3: User Interface

- Simple, user-friendly, and supports English

NFR4: Reliability

- 99.9% uptime

### Use Case Diagram



### Use Case Diagram

Login

Register

Reset Password

## Use case diagram

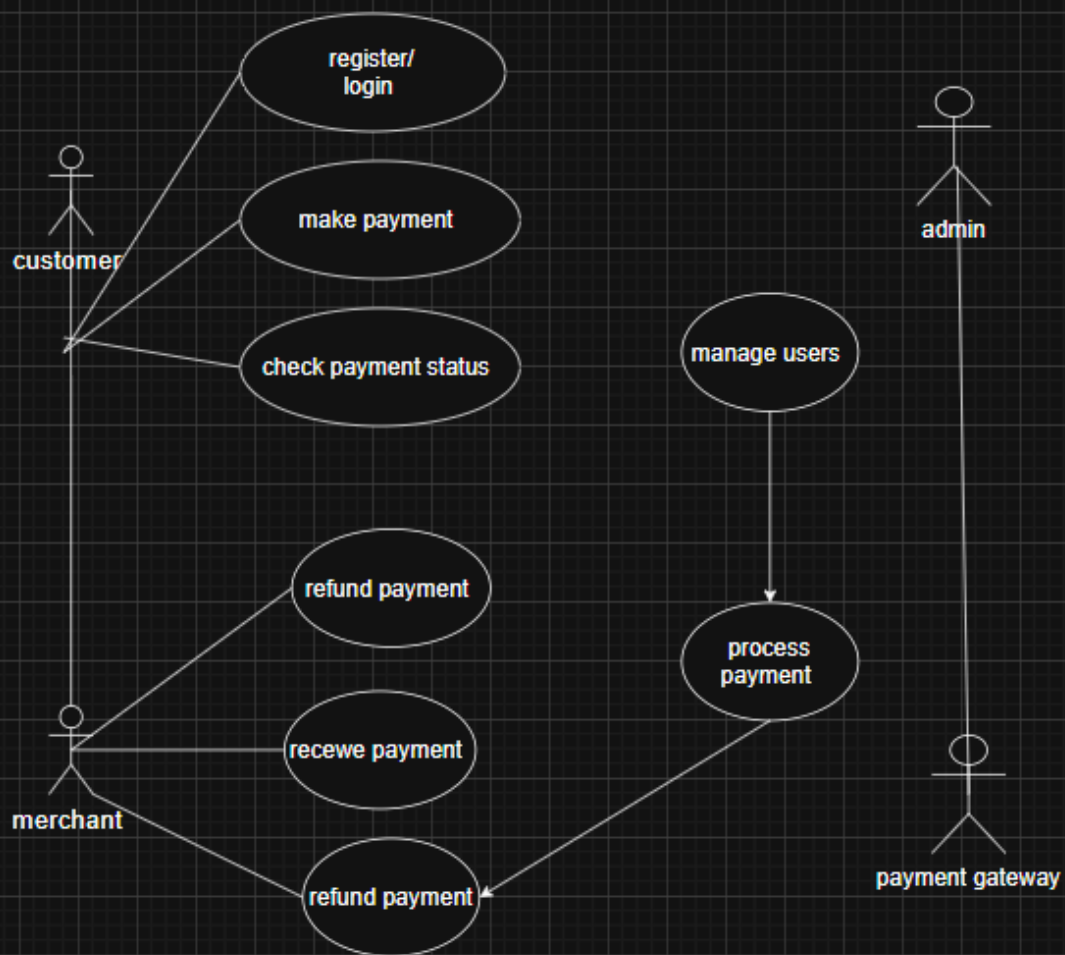
### Actors:

- **Customer** – Uses the system to make payments.
- **Admin** – Manages the system and users.
- **Merchant** – Receives payments.
- **Payment Gateway** – External system for processing payments.

### Use Cases:

- Register/Login (**Customer, Merchant**)
  - Make Payment (**Customer**)
  - Receive Payment (**Merchant**)
  - Check Payment Status (**Customer, Merchant**)
  - View Transaction History (**Customer, Merchant**)
  - Refund Payment (**Merchant**)
  - Manage Users (**Admin**)
  - Monitor Transactions (**Admin**)
  - Process Payment (**Payment Gateway**)
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## kashly use case diagram



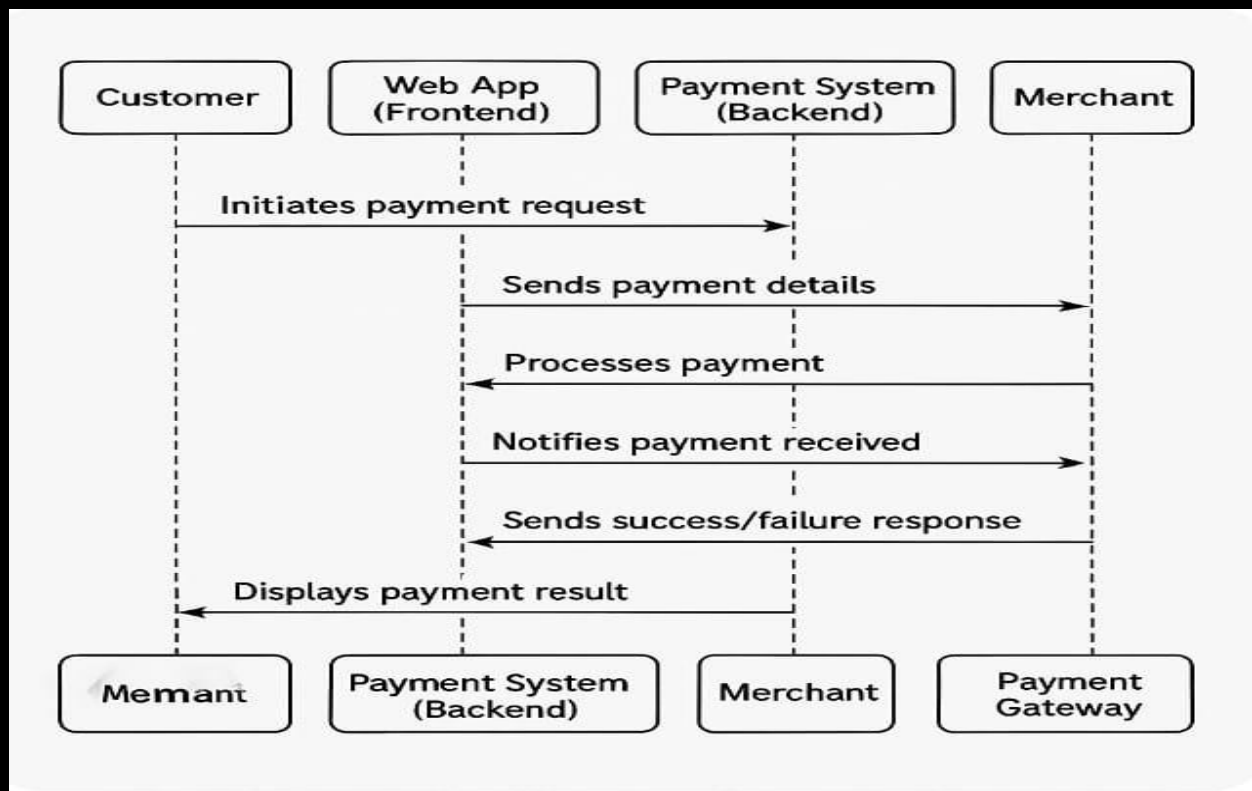
## **Sequence diagram**

### **Participants:**

- **Customer**
  - **Web App (Frontend)**
  - **Payment System (Backend)**
  - **Merchant**
  - **Payment Gateway**
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### **Main Scenario**

- **Customer** → **Web App**: Initiates payment request
- **Web App** → **Payment System**: Sends payment details
- **Payment System** → **Payment Gateway**: Processes payment
- **Payment Gateway** → **Payment System**: Returns payment confirmation
- **Payment System** → **Merchant**: Notifies payment received
- **Payment System** → **Web App**: Sends success/failure response
- **Web App** → **Customer**: Displays payment result



## **Activity diagram**

### Payment Process

