## System Name

## rentflex

## Purpose

This system provides an end-to-end digital solution for customers to browse, select, and book rental vehicles, while allowing administrators to manage bookings, approve or reject requests, and control user access. It aims to streamline the car rental process and enhance user experience through automation and transparency.

## User Roles

1. Customer

* Registers and logs into the system
* Selects desired rental period
* Views available vehicles based on the selected dates
* Adds optional services (e.g., insurance, GPS, child seat)
* Previews total estimated cost
* Submits a booking request
* Views the status of current and past bookings
* Cancels pending bookings if needed

1. Administrator

* Logs into the admin dashboard
* Views all bookings and filters by status
* Approves or rejects booking requests
* Sends notifications to users upon decision
* Manages vehicle inventory (add/update/delete)
* Blocks or unblocks user accounts

## Main Business Flow (Happy Path)

### 1. Booking Process (Customer)

* The customer logs in and selects a rental period.
* The system displays all vehicles available during that period.
* The customer selects a vehicle and chooses optional extras.
* The system provides a cost preview including base rental fee and extras.
* The customer confirms and submits the booking request.
* The booking is created in the system with 'pending' status.

### 2. Booking Approval (Administrator)

* The admin logs in and views pending bookings.
* The admin reviews a request and chooses to approve or reject it.
* The booking status is updated accordingly in the system.
* A notification is automatically sent to the customer informing them of the outcome.

### 3. (Future Extension) Payment

* Upon approval, the customer submits payment information.
* The system records the payment details and marks the booking as 'completed'.

### 4. (Future Extension)Notifications

* Whenever a booking status changes, the system generates and delivers a notification to the user.
* Notifications can be viewed from the customer dashboard.

## Key Benefits

* Fully online vehicle rental process with real-time availability
* Transparent cost preview before booking
* Role-specific operations for customers and administrators
* Modular structure for future integration with payment gateways and refund systems