Car Management System – Approach Document

## 1. Overview

* The Car Management System is a role-based platform designed to manage interactions between three types of users: Admin, Renters, and Purchasers. It includes functionalities like post creation, admin approval, chat systems, and role switching.

# 2. User Roles

→ Admin

→ Renters

→ Purchasers

## 3. Authentication

* - Login/Signup pages for all roles.
* - Admin credentials are manually added in Firebase.

## 4. Data Storage

* - All data (users, posts, chat logs) will be stored in Firebase.

# 5. Functional Modules

## 5.1 Post Management

* - Renters create posts for car rentals.
* - Admins review and approve/reject posts.
* - Only approved posts are visible to purchasers.

## 5.2 Chat System

* - Purchasers can initiate chat with renters who created a post.
* - Chat Support should also be available between users and admin.

## 5.3 Role Switching

* - Purchasers can apply to switch their role to Renter.
* - A request form is sent to the admin.
* - Upon approval, their role is updated to Renter.
* - A user who logs in as a Renter cannot switch back to Purchaser.

## 6. Admin Features

* - View all posts (approved and pending).
* - Approve or reject posts.
* - View all users and manage role requests.
* - Access chat support to assist users.

## 7. Future Improvements

* - Enable dual-role access (e.g., same user as both renter and purchaser) with toggles.
* - Advanced filtering/sorting of posts.
* - Chat notifications and history logs.