# FACULTY OF ENGINEERING & COMPUTING SCIENCES TEERTHANKER MAHAVEER UNIVERSITY, MORADABAD



# **CAR RENTAL SYSTEM**

**Project Synopsis** 

PROJECT (IDS353)

Date :- 30/09/2023 Degree :-

**BACHELOR OF TECHNOLOGY (CSE - I\_Nurture)** 

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#### 1. PROJECT TITLE

Car Rental System in Java

## 2. DOMAIN

Vehicle Rental Management

### 3. PROBLEM STATEMENT

The existing car rental systems lack an efficient, user-friendly, and reliable platform for both customers and rental agencies to manage vehicle rentals. This project aims to address these issues by developing a comprehensive car rental system using Java.

## 4. PROJECT DESCRIPTION

#### 1.1 4.1 Scope of the Work

This project involves designing and implementing a Java-based car rental system that allows customers to search, book, and manage vehicle rentals. Rental agencies, Costumers can list their vehicles, manage bookings.

#### 1.2 4.2 Project Modules

User Registration and Authentication

Booking and Reservation System

Availability

Real-time Tracking

Reporting and Analytics

Customer Support and Assistance

Data Security and Privacy

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#### 5. IMPLEMENTATION METHODOLOGY.

Agile development methodology with iterative cycles and frequent testing

#### 6. TECHNOLOGIES TO BE USED

#### 6.1 Software Platform

Java for backend development

MySQL for database management

#### 6.2 Hardware Platform

Standard server hardware for hosting the system

#### 6.3 Tools

Integrated Development Environment (IDE) for Java development (e.g., Eclipse, IntelliJ IDEA)

Version control system (e.g., Git)

Web server for hosting (e.g., Apache Tomcat)

### 7. ADVANTAGES OF THIS PROJECT

- Improved efficiency in managing vehicle rentals.
- Enhanced user experience for customers and rental agencies.
- Real-time tracking and reporting capabilities.
- Increased transparency and data security.

## 8. FUTURE SCOPE AND FURTHER ENHANCEMENT OF THE PROJECT

- Integration with GPS for location tracking.
- Integration with payment gateways for seamless transactions.
- Integration with UPI for payment flexibility.
- Al-driven recommendations for vehicle selection.

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## 9. TEAM DETAILS

| Project Name<br>& ID | Course Name  | Student ID | Student Name   | Role       | Signature |
|----------------------|--------------|------------|----------------|------------|-----------|
| CAR RENTAL           | B.tech(DS)   | TCA2266003 | Arpan Rastogi  | Developer. |           |
| SYSTEM.              | B.tech(CTIS) | TCA2250006 | Arif Ali       | SQL.       |           |
|                      | B.tech(CTIS) | TCA2250008 | Abhishek Tyagi | Tester.    |           |

# 10. CONCLUSION

The Car Rental System in Java aims to revolutionize the vehicle rental industry by providing an efficient and user-friendly platform for both customers and rental agencies. With real-time tracking, secure payments, and advanced features, it promises to improve the overall rental experience.

# 11. REFERENCES

Geeksforgeeks,etc.

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