**PANDIT DEENDAYAL ENERGY UNIVERSITY**
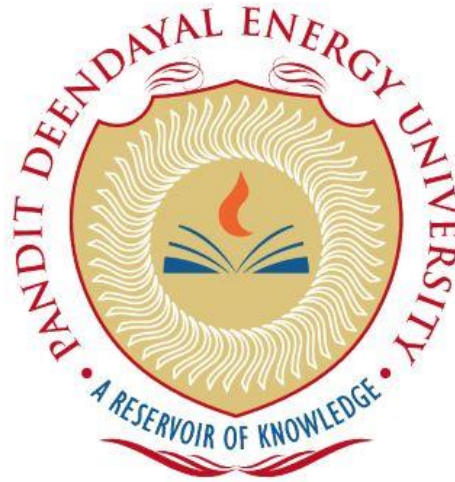
**SCHOOL OF TECHNOLOGY**



**Course: Advanced Web Technology Lab**

**Course Code: 20CP313P**

**Project Report**

**B.Tech. (Computer Engineering)**

**Semester 6**

**Submitted To:**  **Submitted By:**
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Div.: 6 (G11)

# Project Title: WhealDeal – Go Places, Go Far

Buy, Sell or Upgrade Your Car or Bike – Full-Stack Vehicle Marketplace

## Introduction

WhealDeal is a full-stack web application developed using the MERN stack (MongoDB, Express.js, React.js, Node.js). It offers a one-stop solution for users to:
- Buy a used vehicle (bike or car)
- Sell their own vehicle with condition & image
- Get a dynamic price estimate
- Book test drives
- Admin can manage listings and bookings

The platform features a clean, responsive UI and real-time interaction with a MongoDB database. It emphasizes a smooth user experience and intuitive navigation.

## Functionality (Features)

### Vehicle Listing (Selling)

Sellers enter details (type, make, model, km, year, condition). Upload vehicle images. Estimate price is calculated automatically. Vehicles are listed for buyers to view.



### Vehicle Browsing (Buying)

All listed vehicles are shown. Includes images, price, make, model, and condition.

## Price Estimator

Real-time price estimate for a vehicle based on km driven, year, and condition.

### WhealDeal - Go Places, Go Far

**Estimate Your Vehicle Price**

Car

2020

10000

Honda

Jazz

Excellent

Get Estimate

## Book a Test Drive

Enter name, contact info, vehicle of interest. Select preferred date. Info saved in database.

### WhealDeal - Go Places, Go Far

**Book a Test Drive**

HENEEL CHETAN PARMAR

parmarheneel511@gmail.com

08866939139

Honda City

dd - mm - yyyy

Book Test Drive

## Admin Panel

View all vehicle listings. View all test drive bookings. Delete any record directly. Live update after each action.

### WhealDeal - Go Places, Go Far

## Admin Panel

**Vehicles Listed**

Honda Jazz (2020) - Car - Condition: Good - ₹50000    [Delete]

Honda Jazz (2020) - Car - Condition: Good - ₹50000    [Delete]

Suzuki Wagonr (2019) - Car - Condition: Excellent - ₹50000    [Delete]

Suzuki Wagonr (2019) - Car - Condition: Excellent - ₹50000    [Delete]

**Test Drive Bookings**

HENEEL PARMAR | | |    [Delete]

## Frontend (React + Plain CSS + Font Awesome)

- React Functional Components with Hooks (useState, useEffect)
- React Router for page navigation
- Axios for API communication
- Font Awesome icons for UI polish
- Responsive, minimal design using Flexbox & Grid

## Backend (Node.js + Express + MongoDB)

Express.js REST API with modular routing. MongoDB for persistent storage.
Mongoose models:
- Vehicle model
- TestDrive model

Admin APIs:
- GET /api/vehicles – fetch all vehicles
- POST /api/vehicles – add new listing
- DELETE /api/vehicles/:id – delete vehicle
- POST /api/test-drive – book test drive
- GET /api/test-drive – fetch all bookings
- DELETE /api/test-drive/:id – delete booking

# Database (MongoDB Local or Atlas)

Database Name: whealdeal

Collections:

- vehicles

- testdrives

localhost:27017 > whealdeal > vehicles

Open MongoDB shell

Documents 4    Aggregations    Schema    Indexes 1    Validation

Type a query: { field: 'value' } or **Generate query** ✦

Explain    Reset    **Find**    </>    Options ▶

⊕ ADD DATA ▾    ☑ EXPORT DATA ▾    ✏ UPDATE    🗑 DELETE

25 ▾    1 – 4 of 4    ↻    ‹    ›    ▾    ☰    {}    ⊞

```
_id: ObjectId('67f4a71b9bd49907874741d8')
type : "Car"
year : 2020
km : 10000
make : "Honda"
model : "Jazz"
condition : "Good"
▸ images : Array (1)
priceEstimate : 50000
__v : 0
```

```
_id: ObjectId('67f4a96e51c3fbb2a4b99a2a')
type : "Car"
year : 2020
km : 10000
make : "Honda"
model : "Jazz"
condition : "Good"
▸ images : Array (1)
priceEstimate : 50000
__v : 0
```

localhost:27017 > whealdeal > testdrives

Open MongoDB shell

Documents 1    Aggregations    Schema    Indexes 1    Validation

Type a query: { field: 'value' } or **Generate query** ✦

Explain    Reset    **Find**    </>    Options ▶

⊕ ADD DATA ▾    ☑ EXPORT DATA ▾    ✏ UPDATE    🗑 DELETE

25 ▾    1 – 1 of 1    ↻    ‹    ›    ▾    ☰    {}    ⊞

```
_id: ObjectId('67f4a9b451c3fbb2a4b99a2c')
name : "HENEEL PARMAR"
__v : 0
```

# Development URLs

Frontend: http://localhost:5173

Backend: http://localhost:5000

# Summary

WhealDeal is a complete full-stack MERN project focused on solving the used vehicle marketplace problem. It allows seamless buying, selling, and upgrading of vehicles. All actions are data-driven and connected with a MongoDB backend. The project demonstrates proficiency in building real-world, component-based, dynamic web apps.