

# Test Plan Document

**Project Name:** Majestic\_Grid  
**Module:** Car Brand Management  
**Prepared By:** Himpreet Kaur (QA)  
**Date:** 27 July 2025  
**Version:** 1.0

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## 1. Introduction

This test plan defines the strategy, scope, approach, resources, and schedule of the testing activities for the **Login and Dashboard** module of the **Majestic Drives** application. It aims to ensure that the application meets the defined quality standards and business requirements before deployment.

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## 2. Objectives and Tasks

### 2.1 Objectives

- Validate functionality of Login page.
- Validate functionality for Dashboard page for adding, editing, deleting, and listing car brands.
- Ensure the application handles edge cases (e.g., duplicates, invalid input).

### 2.2 Tasks

- Requirement Analysis
  - Test Case Design
  - Test Environment Setup
  - Test Execution (Manual & Automation)
  - Defect Reporting & Retesting
  - Final Reporting & Sign-off
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## 3. Scope

- UI Testing of the Login page and Car Brand Dashboard
  - API Testing for backend services for both login and dashboard page features
  - Basic security validations (unauthorized access)
  - Dashboard page covers CRUD functionality.
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## 4. Test Strategy

### 4.1 Testing Types

- Functional Testing
- UI Testing
- Regression Testing
- API Testing (via Postman/RestAssured)
- Automation Testing (Selenium + TestNG + Extent Reports)

### 4.2 Testing Levels

- Unit Testing (handled by Dev)
  - Exploratory Testing
  - User Acceptance Testing (UAT)
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## 5. Test Environment

Component	Description
Frontend	React.js
Backend	Node.js + Express
Database	MongoDB
Test Environment	Localhost
Tools	Selenium, TestNG, RestAssured, GitHub, VS Code, Eclipse, Extent Reports, GoogleChrome

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## 6. Test Deliverables

- Test Plan Document
  - Test Cases (Manual & Automated)
  - Test Data
  - Bug Reports (via Jira)
  - Test Summary Report
  - Extent HTML Reports
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## 7. Entry and Exit Criteria

## 7.1 Entry Criteria

- Requirements are finalized and approved.
- Test environment is configured.
- All APIs are stable.
- Test data is available.

## 7.2 Exit Criteria

- All critical test cases are executed.
  - No open high/critical severity bugs.
  - Test Summary Report is signed off.
  - All automated tests have passed.
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# 8. Testing Schedule

Phase	Date
Requirement Analysis	28 Jul 2025
Test Case Design	28 Jul 2025
Environment Setup	28 Jul 2025
Manual Test Execution	29 Jul 2025
Automation Development	29 Jul 2025
Defect Reporting & Retest	29 Jul 2025
Final Report & Sign-off	29 Jul 2025

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# 10. Risks & Mitigation

Risk	Mitigation
Unstable build during testing	Use a stable staging environment (Expected)