# CS 255 Business Requirements Document

System Components and Design  
  
Purpose  
- The purpose of the DriverPass project is to create an integrated system to support students in preparing for and passing their driving tests.  
- The client is DriverPass, a company focused on helping students with both online and on-the-road driving instruction.  
- The system should allow students to register, schedule driving sessions, take practice exams, view results, and receive instruction packages.  
  
System Background  
- DriverPass identified a gap in driver education, with over 65% of applicants failing their exams due to inadequate preparation.  
- The system must support various stakeholders including students, instructors, secretaries, the IT officer, and management.  
- Components include a registration module, scheduling module, online class interface, reporting tools, security layers, and admin dashboards.  
  
Objectives and Goals  
- Enable users to register, modify, and cancel reservations online.  
- Enable secretaries to manually schedule and register students.  
- Provide access to DMV-compliant online practice tests and lessons.  
- Allow drivers to record session notes and track lesson history.  
- Ensure system accessibility from web and mobile devices.  
- Implement strong security protocols and role-based access.  
  
Requirements  
  
Nonfunctional Requirements  
  
Performance Requirements  
- System should be accessible via web and cloud-based infrastructure.  
- Minimal latency and 24/7 uptime with redundancy.  
- Regular backups and real-time data tracking.  
  
Platform Constraints  
- Runs on cloud-based infrastructure with web access via modern browsers (Chrome, Firefox, Edge).  
- Backend support through relational database (SQL).  
  
Accuracy and Precision  
- Login required with username and password for all roles.  
- Tracks changes to records (reservation edits, cancellations, etc.).  
- Flags inconsistent data (e.g., mismatched pick-up/drop-off).  
  
Adaptability  
- Admin can enable or disable packages without system code changes.  
- IT officer has full permissions to manage users and system updates.  
- System scalable to support added modules in future iterations.  
  
Security  
- Role-based access (Admin, IT, Secretary, Student).  
- All data transactions are encrypted (SSL/TLS).  
- Password reset functionality available to users.  
- Login lockout after multiple failed attempts.  
  
Functional Requirements  
- The system shall allow users to register for lessons and online exams.  
- The system shall validate user credentials during login.  
- The system shall allow secretaries to input and modify user data.  
- The system shall store driving session data, including time and driver notes.  
- The system shall provide users with a dashboard showing test progress.  
- The system shall generate printable activity and audit reports.  
- The system shall connect with the DMV to receive real-time updates.  
  
User Interface  
- Designed for four user types: Student, Secretary, Admin, IT Officer.  
- Students access training materials, tests, schedules.  
- Secretaries input customer data and manage reservations.  
- Admins access business reports, user metrics.  
- IT handles account management and configuration.  
- Interface accessed via browser and mobile-friendly.  
  
Assumptions  
- Users will have internet access and basic digital literacy.  
- All vehicles and instructors are managed in a separate internal system.  
- Payment processing handled through a secure third-party gateway.  
  
Limitations  
- Current system excludes direct module management by non-technical staff.  
- Real-time DMV updates rely on external APIs.  
- Budget constraints may limit scope for real-time GPS tracking and advanced analytics in this phase.

# Gantt Chart

