# CS 255 Business Requirements Document

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## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* DriverPass wants a system to help students pass their driving tests by offering online practice exams and driving lesson scheduling. The system should be accessible online and work on any device.

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* DriverPass is filling a gap in the market by offering both online tests and on-the-road training. The system will handle lesson scheduling, student progress tracking, and package management for different user roles.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* Students schedule lessons and take tests.
* Admins track reservations and user activities.
* Reports show student progress and activities.
* Future flexibility for adding or updating lesson packages.

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* Must be fast and reliable, with web-based access and downloadable reports.

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* Runs on any web browser with a backend database.

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Secure user management, clear error notifications, and accurate tracking.

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Easy user management and updates to packages without coding changes.

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Encrypted data, strong login, password recovery, and protection against hacking attempts.

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall allow users to schedule and manage driving lessons.
* The system shall provide online practice exams.
* The system shall track progress and generate reports.
* The system shall allow admin access to reset passwords and manage users.

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* **Students**: Schedule lessons, take tests, check progress.
* **Secretary**: Manage bookings and appointments.
* **Admin**: Full control over accounts and system settings. The interface will be simple and easy to use, working on all devices.

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* Users will have internet access and basic tech skills.
* IT staff will handle updates and maintenance.

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* System designed for DriverPass only, not scalable for other companies.
* Adding or removing packages requires developer help.

### Gantt Chart

A screenshot of a graph

Description automatically generated