# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## 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?*

The system for DriverPass is designed to facilitate online and on-the-road driver training. This system aims to fill a market void by offering comprehensive tools that train students for driving tests beyond merely studying previous test papers. The purpose of this system is to provide students with access to online practice exams, on-the-road training, and real-time tracking of their learning progress. The system will also manage reservations for driving lessons and integrate these functionalities into a seamless user experience for students, instructors, and administrative staff.

### 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 identified a significant gap in the market for effective driving test preparation. With more than 65% of students failing their driving exams due to inadequate preparation, DriverPass aims to offer a solution that includes practical training and online resources tailored to the DMV's requirements.

### 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?*

* Provide students with a flexible and comprehensive platform for driving test preparation.
* Allow users to schedule and manage driving lessons easily.
* Ensure instructors and administrative staff can track, manage, and report on student progress and lesson reservations.
* Offer secure and scalable access to system resources for all users.

## 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?*

* The system should support concurrent access for up to 1,000 users without performance degradation.

#### 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?*

* The system should be accessible on both desktop and mobile devices.
* It must run on a web-based platform with cloud integration.

#### 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?*

* The system must accurately track lesson schedules, student progress, and test results.
* Data synchronization should ensure consistency across all user devices.

#### 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?*

* The system should allow easy updates to include new training modules or DMV policy changes.
* Flexibility to disable or modify training packages without system downtime.

#### 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?*

* Implement role-based access control to ensure data privacy and integrity.
* Secure data transmission and storage with encryption.

### 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.”*

### 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 should be able to register, schedule lessons, and take practice exams online.
* Instructors and administrative staff should have access to a dashboard for managing reservations and monitoring student progress.
* **User Roles**:
* **Students**: Register, schedule/cancel lessons, access online tests.
* **Instructors**: View schedules, input lesson feedback, manage student progress.
* **Administrators**: Oversee system operations, manage user access, track performance metrics.
* **Lesson Management**:
* Ability to schedule lessons, assign instructors, and track lesson status.
* Integration with a calendar system to manage bookings efficiently.
* **Test Management**:
* Provide a repository of practice exams with real-time scoring and feedback.
* Track test attempts and outcomes for each student.
* **Reporting**:
* Generate reports on student performance, lesson completion, and instructor feedback.

### 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?*

* All users have basic computer literacy and access to the internet.
* The DMV will provide timely updates regarding changes in test content or policy.
* Students will use personal devices for accessing the online platform.

### 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?*

* The initial system will not support offline lesson management.
* Customization of training packages will require administrative approval.
* The system will not directly handle payment processing; instead, it will interface with third-party payment gateways.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

*A graph of a project

Description automatically generated*