# CS 255 Business Requirements Document - DriverPass

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 purpose of this project is to create a system for DriverPass that will allow them to provide students with access to online practice exams and on-the-road training to better prepare them for driving tests. The system should be able to handle the following:

* Tracking student progress
* Scheduling driving lessons
* Managing student accounts
* Communicating with students

### 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?*

* Allow access to data from anywhere, both online and offline.
* Allow for the reservation of driving lessons, with each lesson being two hours long and the customer specifying the desired day and time.
* Support different user roles with varying access levels.
* Track user actions, such as making, canceling, or modifying reservations.
* Keep track of the driver, time, and car for each driving lesson.
* Be adaptable to accommodate changes in DMV policies or sample questions.

### 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?*

* The system shall allow customers to make reservations for driving lessons online.
* The system shall support three different driving packages.
* The system shall enable the creation, cancellation, and modification of appointments online.
* The system shall display online test progress, including test name, time taken, score, and status.
* The system shall show driver notes, including comments and lesson times.
* The system shall collect customer information, including name, address, phone number, state, and credit card details.
* The system shall allow customers to reset their passwords automatically.
* The system shall accommodate future customization of driving packages.
* The system shall allow for the disabling of a package if needed

## 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 be accessible from any computer or mobile device, implying the need for a web-based interface.
* The system should provide access to data both online and offline.
* The system should be hosted on a cloud platform to eliminate the need for local backups and security management.

#### 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 have a database to store information.
* The system should have a web-based interface.
* The system should be hosted on a cloud platform.

#### 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 should inform the administrator if a user forgets their password.
* The system should be case-insensitive when logging in.

#### 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 for the addition, removal, and modification of users without changing code.
* The system should adapt to platform updates seamlessly.
* The IT administrator should have full access to all accounts for password resets and user removal.

#### 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?*

* The user should be required to log in with a username and password.
* The connection between the client and the server should be secured using HTTPS.
* The account should be locked after a certain number of failed login attempts to prevent brute force attacks.
* If a user forgets their password, they should be able to reset it automatically.

### 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.”*

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* The system shall accommodate future customization of driving packages.
* The system shall allow for the disabling of a package if needed.

### 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.)?*

* The interface should be simple and easy to use.
* The interface should be accessible from any computer or mobile device.
* The interface should display online test progress, driver notes, and customer information.
* The interface should have a search bar.
* The interface should have a contact form.

### 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?*

* It is assumed that all users will have access to a computer or mobile device with internet connectivity.
* It is assumed that the cloud platform will provide sufficient security and backup capabilities.
* It is assumed that the DMV will provide timely updates on any changes in policies or sample questions.

### 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 system will be limited by the availability and reliability of the cloud platform.
* The system will be limited by the accuracy and timeliness of updates provided by the customer.
* The system will be limited by the resources and time available for development.

### 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 screenshot of a computer

Description automatically generated*