# 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 purpose of this project is to provide students with access to online practice exams and on-the-road training to better prepare them for driving tests.
* Create a system that offer these resources
* The client is Liam, owner of DriverPass
* System should be able to create and adjust driving lesson reservations.

### 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?*

* + User interface as provided by Liam
  + Data storage for User account information, progress and booking details.
  + Listing of available packages.
  + Reservation booking
  + Catalogue of classes and tests
  + Easily access information

### 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?*

* Able to access the data on computers or mobile devices.
* Cloud server access
* Role privileges with various security clearance.
* User and employee data tracking.
* Ability to create/modify/cancel reservations for in person lessons.
* Access to online courses and tests.
* Offering of various offered packages.
* Customer input for personal information.
* Connection to DMV for up-to-date compliance.

## 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 environments this system needs to run on are both web-based and mobile.
* System should be run over the cloud.
* The system should run quickly to allow for seamless student learning and employee efficiency.
* The system should be updated continuously to accommodate reservations and schoolwork.

#### 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 run on Windows, as well as both IOS and Android OS. This will allow for the broadest user outreach.
* The backend will require a database, cloud server, and application.

#### 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?*

* Different users will have a unique authorization login based off either a created user ID or email.
* The input for User should not be case sensitive for the login, however it should be case sensitive for passwords.
* The system should inform the admin of any problems as they arise.

#### 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 administrator side of the application should be able to make user changes without modifying code.
* The system will adapt to most updates automatically as it will be hosted on the cloud.
* Critical updates will need to be addressed by a team of developers.
* The IT admin will need full access to the system to ensure that any problems can be resolved.

#### 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?*

* Requirements for user login will be both user ID and password, as well as email confirmation for account creation.
* Two factor Authentication is also recommended.
* Connection and data exchange should use encryption such as SSL.
* Cloud server will handle most security issues.
* If a “brute force” hacking attempt occurs, meaning multiple logins with incorrect input (approximately 3-5 attempts) the account should be locked. The account should only be accessible to a DriverPass employee with sufficient access authority. The user will need to be informed of this attempt through email and require a password change.
* A “forgot password” option on login should be available that allows users to change their password by using their email.

### 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 have functional buttons and icons to allow for easy navigation throughout various LMS applications.
* The system shall allow for posting assignments and submissions.
* The system shall update and display grades and allow for teacher feedback.
* The system shall accommodate virtual classrooms.
* The system shall display offered packages and classes and allow for selection.
* The system shall display and allow for adjustment of selected options.
* The system shall restrict access based on user authority.

### 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 needs to be simple to use and understand.
* It needs to fit into the suggested schema presented by DriverPass.
* The interface needs to be able to access all various pages of the system.
* The different users of the interface will be the DriverPass employees and the students.
* Employees will need to be able to create customer reservations and adjust them as needed.
* Students will need to be able to access learning resources and create and adjust only their own reservations.
* Users will interact with the interfaces by “clicking” on desired applications or inputting text. This can be done through either mobile or browser access.

### 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 access to either a smartphone or device that can access the internet.
* Internet connection.
* Has valid credentials, e.g., student, faculty, administrative.

### 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?*

* Limitations include module additions unless addressed by development team.
* In person interaction with fellow students.
* Student monitoring for honest classwork.
* Resources are dependent on DriverPass success and ownership preferences.

### Gantt Chart

A picture containing timeline

Description automatically generated