# 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 construct an online system where students can participate in online courses and practice testing for their driver's license. Liam is the client of this project, and they want the system to have up-to-date testing and courses to help support students in learning how to drive.

### 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 wants the system to be not only accessible online but also offline. The concern with having this system both on and offline is that there will be a conflict when changes are saved. From the interview notes the dev team tries to suggest that the system should run off of the cloud for the interface. Having different levels of access for certain employees was also brought up.

### 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?*

By the time the system is completed, it should be able to allow consumers to choose from the listed packages on the type of service they are looking for. Driving sessions are always two hours while the packages have 6, 8, 12 hours of in-car training. These hours will be split for the two-hour sessions and completed once they reach the total amount per package.

For their online interface, the student's view will display the logo, online test that is in progress, driver notes, driver photo/student photo, students’ demographics and their special needs if any. Liam wants the test to display the student's name, time taken, score, and the status of the test (in progress, not taken, failed, or passed).

The student will also be able to track what driver they are matched with as well as the time of the test and what car they will be driving. The main tasks that need to be included in the design are for the schedule, test, and tracking to be up to date.

## 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 will need to be updated frequently to ensure that bugs or security breaches are fixed.
* To make sure that any DMV guidelines are up to date, this would need to be updated as soon as the information is received so that students are informed of these changes as well.
* The system is web-based so it will need to have a decent speed for back-and-forth communication between the servers.

#### 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?*

* This system would be on a browser so anything like Chrome, Microsoft Edge, Firefox, etc.
* The website will be accessed on both PC and mobile devices, for the mobile viewing experience it will need to be able to be resized to fit the screen.
* The back end will need a database to store information.

#### 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?*

* For different users they would be given a login user email and password where input case sensitivity is a necessity for creating protection for users. If the user inputs their information differently or incorrectly the system would then alert the admin team.

#### 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?*

* For any user changes the system should allow for those changes to happen without changing the code. For this functionality to be used you would have to write in the code, POST request and controllers. The system will adapt to the platform updates by receiving from the programmers. The IT admin will have access to everything such as user accounts, passwords removing unavailable employees, etc.

#### 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?*

* For logging into the system, the user will need to have a password and username to gain access. HTTP would be required to ensure that the data exchanged between the client and server is secure. If there is an attempt at “brute force” hacking, then the administrator will be alerted after a consecutive number of failed attempts. The number of attempts that failed to give the user access will be set between 1-10. After 4 attempts the login information will be inaccessible for the user to try again, and these attempts will be flagged for the admin team.

### 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 confirm consumer selection from the three offered packages that the clients wants to include
* The system shall confirm consumer details for example: first and last name, address, payment method, phone number and state
* The system shall confirm the type of user logging in that being student or administrator
* The system shall allow user to reset passwords if needed
* The system shall display exam progress and scores for the student
* The system shall confirm login information from user so that they can access information
* The system shall be adjusted to any DMV changes

### 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 user will see a home page, exam, access to grades, user information, Registration, status of exams, any notes from the exam, and information from the instructor who did the exam, as well as contact information for the user.
* Admins would see user information where they can delete user information/access or update the user password in case the user forgets the password.

### 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?*

* In terms of user technology, I can say it's safe to assume that the system will be available 24/7 for users to access, the users will be DMV students, and there will potentially be an app version of the DriverPass website.

### 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 to consider for the project would be the system requires a good and stable internet connection to be accessed. Without this connection, user data will not be updated. The budget and time frame can also be a limitation.

### 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.*

[Insert chart]

A calendar with multiple colors

Description automatically generated with medium confidence