# 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?*

Our client, Liam, wants to “take advantage of a void in the market when it comes to training students for the driving test at their local [DMV]”. He wants to build a web-based scheduling service that is dynamic and transparent on both ends. It should also employ online tests and allow the students to view their progress at any time.

### 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?*

The system will need a client-server architecture that allows clients to view their locally saved info without needing an internet connection. The system will need to access a database of user info that is updated whenever the respective client logs on while having network connection. Whenever a client connects, the server should check if they have made any progress on tests or any edits to their profile, then update accordingly.

### 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?*

-push/pull user info to/from a database

-update client info upon client login

-clients can select and participate in tests that then update their progress

-test progress as well as all user data should be visible on the home page

-allow clients to schedule in-person lessons and driving sessions

## 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?*

* It will need a web-based version as a well as an application.
* The service is hosted by a server that keeps a central user database.

#### 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?*

* It should probably run on a Linux based server since it’s super portable and cheap to host.
* There must be an administrative backend that allows the IT department to check/change information and make updates as needed.

#### 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?*

* Username match-checks must be case sensitive to avoid duplicate data on the database.
* If there is ever a crash the system should log it in such a way that the admin is able to determine what happened.
* There should be a function where users can manually report a bug and share information regarding the state of their client.

#### 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?*

* Ideally the server will use a stack that contains a database service or API. This would generally allow the admin to easily view and edit the database containing user info, as opposed to having anything hard-coded into the server.

#### 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 simply need a password that matches their specific username. If a mysterious session is detected, you could force a manual login. If that session somehow bypasses, you could forcibly boot them and have the server make note to deny access from that address.

### 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 continually tell the user what it needs from them.
* The system shall always validate user input or indicate why it is invalid.
* The system shall allow users to schedule driving sessions.
* The system shall allow users to change their user info.
* The system shall have an administrative backend.

### 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 interface shall display user info at all times.
* The user interface shall display logo at all times.
* The user interface shall display any special needs the user may have.
* The user interface shall display any notes left by the driver.
* The user interface shall display online test progress at all times.
* The user interface shall display driver photo and student photo.
* The user interface must allow the user the easily view their scheduled sessions.
* The user interface must assist the user during login.
* The user interface must allow the user to easily log out.
* The user interface must prompt the user when attempting to use while offline.

### 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?*

* I’m assuming that there will be tools that would support my plan for the administrative backend.
* I’m assuming that there will be a hosting service that supports my plan for a web-based service with an available in-app experience.

### 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?*

* We just need to get finished before the beginning of the following school year. We want to be finished by May 10th.

### 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