# 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 create an easier way for people to prepare for their driving tests to obtain their license. The client is DriverPass, which is owned by Liam. Liam wants their system to be able to provide online classes, practice tests, and on-the-road training.

### 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 help provide proper training applications for driving tests. They want to fix the problem of lack of a market for a training application to help future drivers prepare for their tests. The different components that are needed are mainly the ability to download reports, host online classes, host practice tests, ability to register for appointments, proper security protocols, web-based interface (preferably on the cloud).

### 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?*

* This system should be able to have online tests and show the user’s progress towards completing them. It should show the user’s personal information along with photos of the user and any special needs for their license. It should also contain a way for the user to jot down notes as they need to from the lessons. Lastly, it should be capable of having the user register for in-person training. A great way to measure these tasks separately is to give them dates of completion where they take an estimated time to complete. This helps keep the entire project on track.

## 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?*

* This system needs to be a cloud ran web-based system. The system needs to run quick enough to keep up with the changes that the DMV might make from time to time. The system only needs to be updated whenever the DMV makes changes to requirements, testing, etc.

#### 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 able to handle at least Windows operating platforms as well as both Android and iOS mobile platforms so the data can be accessed on the go. The back end of this system will require database tables that will be linked to an interface at the end of March.

#### 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?*

* Each customer will call or go online when registering and give their name, address, phone number, state, and financial information to DriverPass to register that particular user. The input would be case-sensitive, and then from there DriverPass can create and edit that user’s account at any time as well as reset passwords in case they are forgotten. Each change from a user will be tracked and notifications will be sent to the administrator of the system so they can keep track.

#### 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 IT administrator will need access to user information such as name, password and address. The system will be a linear system that will be connected to the DMV so, if in the future there are updates to the DMV, the team will know what updates need to be made and update the application as needed.

#### 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 will need a username and password to access their account. Since the system plans to be connected via the cloud, there are many cloud protection services that can be utilized to prevent any information leak from occurring. If the user forgets their password, they can contact the administrator and the admin can then reset their password for them. In the future, a great feature would be to send a password reset link to the user’s registered email address. This streamlines the process and reduces the workload on the administrator.

### 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 users login credentials validated.
* The system shall have an interface to access each module of the system.
* The system shall have a module setup to collect payment via chosen payment method.
* The system shall have accurate legal information regarding the laws of the road in the respective area.

### 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 easily navigable by the user. It should show online test progress, driver notes, special needs, basic user information, and opportunities to include photos. The user will mostly interact with this interface via the application interface to update driver notes and check online test progress. Most of the other information is static and unchanged for the user.

### 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 did make several assumptions in this system design. I assumed that the system would be accessed by both Android and iOS users, and that DriverPass wanted to have compatibility with both of those operating platforms. It was also assumed that the input about a user account would be case-sensitive since that’s common. Lastly, it was assumed that there would be some cloud protection service offered in case of a “brute force” hacking attempt. When personal data is involved, I believe it’s ethical to have proper security in place, even when it was not mentioned.

### 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?*

* I think most limitations will come from a budget, as it wasn’t really discussed in the interview transcript. Between the team working on the system, setting up drivers, purchasing a cloud service with protection, etc. there are many sources of money being spent and no discussion of budget restrictions.

### 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.*

Chart, bar chart

Description automatically generated