# 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?*

* This project should serve as an additionally tool to aid in the development of new drivers’ experience and knowledge in adherence to driving. This should, in theory assist the new drivers with their driving test scores and help them succeed.

### 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?*

* There is an emphasis on this project to be readily available online, with abilities to download for offline review. Since this would be a drivers aid platform it would need security features for proper access to files and profiles. They want to have simulation exams and courses that aid the students’ knowledge in driving instruction and performance. There is a request for the system in place to track all reservations, changes, or cancellations for the provided road training courses as well.

### 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?*

* When the system is in a completed state it should be a fully functional website with the 24/7 capability to modify, book, or cancel driving training meetings. This website should also have information available for online viewing and modifications from our client, while being able to have a downloadable version of documents and media within the site for offline usage. In order to implement these aspects we would have to think of design and functionality implementation. This would include drawing up a UML for the functions of the website, process, and object models.

## 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 would run best as a web-based application as it could be hosted on a cloud service. This would allow it to be platform independent and would allow for it to run smoothly and quickly. This would however require the application to allow access from all the browser platforms. This would be regularly updated every few weeks or so since it will mainly be media display and testing.

#### 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 platform would ideally be run on Linux as it is the preferred system for security and database management. The entire backend could be managed by the cloud services.

#### 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?*

* Users should be able to create a username and password when first accessing the website. The input should be case-sensitive. Additionally, the system should have multi-factor authentication to make it more difficult to hack into an account. It should inform the admin immediately of any problems, glitches, or bugs with the website in order to get it back up ASAP for minimum downtime.

#### 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 platform will allow drivers to make modifications and remove users, and the IT admin will have full access to the system. As needs arise, new features will be incorporated into the platform.

#### 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?*

* In addition to these conventional measures, multifactor authentication is also mandatory for logging in. Any communication between servers happens via cloud computing methods; it is entirely up to the cloud-based software component to exchange data with client machines securely. To keep unauthorized entries at bay, user accounts get locked after four successive failed login attempts using an incorrect. If any account holders forget their original credentials: they can recover them by entering some identifying details into our recovery process-generated message recipient box like email addresses which will be authenticated before resetting linked files related exclusively only back again for same users' devices used previously while registering on this platform.

### 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 validate user credentials.
* The system shall provide driving content and classes.
* The system shall provide practice tests.
* The system shall book reservations for tests.
* The system shall offer the services with the DriverPass affiliation.
* The system shall be efficient and reliable.
* The system shall provide different levels of access based on user credentials.

### 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 must provide the customer the option to make reservations for driving appointment packages, take online classes and tests. The interface must allow driver pass employees to go in and make changes, and update the system as needed. Any device capable of internet connection, such as a mobile phone, laptop, or computer, should allow the user to interact with the interface.

### 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?*

* There was no financial allocation was provided for the creation of our system. So, we must presume that all materials utilized in its construction will fall within acceptable spending limits. Our plans involve utilizing both a Linux environment and cloud technology to aid us in this project. We are also assuming we have easy access to all of this technology and the resources such as staff to regularly keep this system in shape with fixes and updates.

### 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?*

* There are time and financial restrictions that could be in place with a project like this that would require attention. Such as the gantt chart below that outlines time, which allows for only a limited time frame for objectives to be met. The budget is not mentioned, so there will also be a restriction as to who and what is applicable towards this project.

### 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, timeline

Description automatically generated