# 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 design and build a web application for DriverPass.
* The purpose of web application is to provide students with an online driving training to assist them in passing a driving test.
* The client wants the system to allow students to take online driver exams, schedule on-road training, display student information, track reservations, and display driving notes from the trainer taken during the training session.

### 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 educate and train students for a driving test.
* The problem DriverPass is trying to solve is that too many students are failing their driving tests.
* Different components that are needed are the proper material and updates from the DMV , the ability to have 3 different packages available for students, a record of the students’ progress, security to keep the student’s information safe, login , and student 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?*

* The system should be able to educate the students and give them sufficient knowledge to pass a driving test.
* The tasks that need to be monitored are the progress of the student including statuses from tests taken, trainer notes, appointments/reservations made modified or canceled, DMV updates, and making reservations online.

## 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 should be a website over the cloud.
* The system should have sufficient memory to allow users access to the website without the site slowing down or any other complication.
* The system should be updated any time there is an update from the DMV or the administrators regarding adding or removing features.

#### 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 support multiple platforms to ensure this system can be used across multiple devices.
* The system will require a database for the appropriate DMV approved tests.

#### 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 user will be able to create their own unique username and password when first registering on the website. The Input should be case sensitive to increase security of the accounts.
* The system should notify the administrators as soon as a glitch/bug is reported.
* The system would also benefit from a multi-factor authentication to increase the security of the system and help protect the users from hacking attempts.

#### 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 system should allow changes to the users without changing the code.
* The system should only handle platform updates when DriverPass decides to update they system with newer features.
* The IT administrator will need full access to the system to make necessary changes and updates to the system, remove/delete users and former employees who should no longer have access to the system.

#### 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 require their unique username and password as well as confirming a multi-factor authentication.
* The cloud-based service will be required to handle all client and server data exchanges.
* If a “brute-force” hacking attempt is attempted the system should automatically lock the account after 4 incorrect login attempts.
* If the user forgets their password, they should be prompted to enter the email address used during registration and a reset link would be sent to that email 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 validate user credentials when logging in.
* The system shall display the different provided driving packages.
* The system shall provide up-to-date tests and classes.
* The system shall display what trainer is assigned to the user.
* The system shall allow different tiers of access based on the user and their privileges.
* The system shall display test completed, tests failed, and tests in-progress.
* The system shall book reservations when made by a user.
* The system shall be fast, efficient, and stay up to date with DMV requirements.

### 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 allow DriverPass staff to make changes and update the system as required.
* The interface must provide the users with options to make/cancel reservations.
* The interface must allow the users to take online tests.
* The user should be able to interact with the interface from any platform capable of an internet connection.

### 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?*

* The budget was not explicitly stated for the project.
* The potential cost of the driving packages nor registration fees were not discussed.
* The non-specified budget causes us to assume that what we are planning to design will be within budget.
* With no clear factor of the price of the packages or registration, we are assuming that either the packages are free of cost and included with registration, registration comes at cost and the packages are free or both are free or cost some amount.

### 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 currently have a limited of time of approximately 3 months and 18 days to complete the system. We would need to have an agile/Scrum approach to complete the work in time.
* We have a limited number of employees to achieve creating, designing, developing, and testing a website within the time limit.
* The limitations I see in the system design are whether the client, DriverPass ,will require payment of either the packages or registration. Without this information we could develop a product that was not what was envisioned by our client, and we could design it in such a way what may require a complete recoding of the system to add a payment system.

### 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.*

