# 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?*

* In noticing a lack of resources for preparing for a driver’s license test, DriverPass has found an opening.
* DriverPass has elected to create a website that will give students access to online practice tests as well as the option to book road training with a professional teacher.

### 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 help increase the passing rate of new drivers attempting their license test.
* The system should include practice tests and the ability to schedule in-person road training.
* DriverPass should be available anywhere at any time, provided the user has access to the internet.
* Users should be able to create password protected accounts to protect their information and access their practice history and schedule.

### 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 give users the ability to create, modify, and delete scheduled road training.
* The system should allow users to take practice tests and track performance.
* System security should differentiate between users and grant backend and frontend access accordingly.
* Object models, process models, and UML diagrams should be utilized to plan and design the system.

## 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 cloud-based and accessible over the internet.
* The system should be capable of accepting and implementing modifications without issue.
* Users should be able to access and view all parts of the system without latency issues.

#### 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 built and run on the Linux operating system.
* No physical storage hardware will be necessary as the system will be managed over cloud.

#### 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?*

* User accounts will determine the access levels each user receives. Admin accounts will have access to both the front and backend, client accounts will only have frontend access.
* Automated notifications should alert the admin to any bugs or functionality failures on the site.
* A “Report an Issue” button should be provided to users who may be the first to notice an issue.

#### 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?*

* Admins should have the ability to remove and add to the list of users.
* Admins should be able to add, delete, and modify pages and the logic of the site.
* The DriverPass system should allow for easy updates to be pushed and new features to be added without taking the site offline for long periods of time.

#### 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 data exchanged between the cloud and client should be protected using SSL protocols.
* After several failed login attempts, a user should be locked out of their account until unlocked by an admin.
* Users will create accounts with case-sensitive password protection. Adding multi-factor authentication will also enhance the security of the site.
* Requests to reset passwords should be facilitated through the email address the user used to sign up for DriverPass.

### 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 provide access to classes and practice materials.
* The system shall authenticate users with usernames and passwords.
* The system shall allow users to book road practice.
* The system shall run efficiently.
* The system shall differentiate between regular users and admins.
* The system shall track users progress on practice test material.

### 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 should have a backdoor for admins to enter and make modifications to the system.
* The interface should allow users to easily book driving practice and manage a calendar of scheduled appointments.
* The interface should have a bug-free presentation on mobile platforms and computer browsers.

### 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?*

* We are assuming that a reasonable budget will be provided for this project.
* We are assuming that a cloud-based Linux platform will be the desired build for this project as a web-based platform.
* We are assuming that DriverPass will entice enough driving instructors to satisfy the needs of their users.

### 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?*

* The system must be complete within the five-month window we were given to deliver.
* Man-power may become a limitation on this project if we are to complete it in the window provided.
* Despite not having a firm budget, we must assume we have to stay inside a certain price window for the 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.*

