# 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 client is DriverPass. Their goal is to provide training courses for driving. They also are aiming to offer instructional videos and practice tests. They also offer in-person training if requested by the customer.

### 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 ability to access data, both online and offline. They also want the ability to access the data from any device possible, either mobile or computer related. They need to have the ability to download reports and have the data imported to Excel to work from home. For security, the owner will have admin privileges, this will help them keep track if someone forgets their password and needs their account reset, or if an employee leaves the company, there needs to be an ability to block access if need be. There should also be a reservation system for in-person training, with the ability to cancel, as well as any modifications that are to be made to the reservations. The user should also have access to the ability to make or alter reservations. The system will also have to be in link with the DMV for any updates on the rules of the roads, or changes that need to be in place. The system would also be preferably cloud based, reducing the technical problems to a minimum.

### 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 provide driving training. First a customer will have to sign up for the service, they will be given login information, then they will select which package they would like, and then provide credit card information, as well as personal information (name, address, phone number, etc.). They will also have to specify pick-up and drop-off locations for the training sessions. From there, they will have the ability to schedule their 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?*

* The best environment for the system to run would be a web-based environment. This keeps the physical requirements to a minimum which ultimately reduces overall costs for the system. The system should be fast enough that would allow the user to carry out any action in a timely manner. The user’s internet speed will play a role, but the system should be optimized enough where any action will be quick and almost instant. The system should be updated any time a new feature is added. The best time to update would be when there is a large amount of system downtime, which would probably be sometime in the late night or early morning.

#### 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 best platform for the system would be Linux. It is simple, cost effective, and easy to use. Because we are using a cloud-based system, the cloud would be in charge for managing all security, as well as any other back-end databases.

#### 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 would need their own access tokens. These would include things like setting up usernames, passwords, or even two-factor authentication. Ideally, to reduce the chance of someone having the ability to log into someone else’s account, the input should be case-sensitive. If two-factor authentication is set up and the proper user of the account is notified of someone else trying to log into their account, if the proper user denies access to the account, the system should notify the admin to handle the problem.

#### 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 changes that the user should be able to make would be to add or remove other users of the account. The system would have to apply its updates during the downtime where there is the least amount of traffic on the system. This keeps from hindering a large number of users from being able to use the system. The IT admin would need complete access to the system. This would allow them to make the necessary adjustments to the system when 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 would need a username and password to log in. They would also need a form of two factor authentication, either linked to a phone number or an e-mail address. The cloud system would be responsible for the securing of the connection and data exchange through the back end. If there is a forced entry via hacking, the system should lock the account, and the user would be required to reach out to the DriverPass to verify any security related questions to then unlock the account. The user would also need to come up with a new password. If the user forgets their password, they will need to have a couple security question set up that would allow them to recover and possibly change their password.

### 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 allow the user to book reservations
* The system shall offer some form of practice test
* The system shall give information about their instructor
* The system shall be optimized to run as intended, quickly and efficiently
* The system shall offer information about the different driving packages

### 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 will need to be clean and optimized. The interface will also need to include all the functionality listed from the functional requirements. The interface will also need to be updated when the system updates are released. The interface should also be uniform across all platforms such as laptops, desktops, mobile devices, etc. This would reduce confusion or any frustration on the user’s end.

### 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 need to assume that there is a proper budget set for the system, and any requirements or updates added to the system are also within budget. We also assume that we have the technology capable of running the system, and that the technology is properly maintained.

### 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 are limited to 5 months to build the entire system, and we are not given a proper budget to build the system. This will limit us as we will want to make sure we do not under spend or overspend. With the money we are given, we need to ensure that we have technology that will be the right fit for the system, including specs of the technology needed for the system. We want to ensure that the technology has room for improvement/upgrades.

### 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.*

