# 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?*

* DriverPass has discovered that there are relatively few solutions available on the market to assist drivers in passing their driving tests.
* DriverPass had determined that they wanted us to assist them in developing a website that would provide students with online practice exams as well as the option to schedule 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 their technology to assist in addressing and resolving the issue of people failing their driving tests.
* Driverpass intends to accomplish this by offering online practice exams, seminars, and the option to schedule on-the-road instruction through the system.
* As long as you have an internet connection, the system should allow you to access data from anywhere.
* In order to allow access to different users and the things they may accomplish with the system, the system should also have sufficient security mechanisms.
* The system should keep track of all reservations, cancellations, and changes, and provide three separate on-the-road training packages to pick from.

### 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 this system is finished, clients should be able to book, alter, and cancel on-the-road driver instruction through a fully working website.
* Customers should be able to take practice tests and classes online once the system is complete.
* In order to make modifications if necessary or to further improve the system, the system should only provide specific access to specific workers.
* We should employ object models, process models, and UML diagrams to aid in the creation of the system.
* We need to decide on an operating system and the languages we'll use to build the website.

## 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 web-based, in the form of a cloud-based website.
* Users should be able to visit the website without any issues if the system is quick enough.
* Any time the client decides to add new functionality, the system should be updated.

#### 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 should run on Linux.
* The system will manage all security through the cloud, which will also take care of the databases required for the back end.

#### 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?*

* When a user first visits the website, he or she should be able to generate a username and password. Case should be considered when entering data. Multi-factor authentication should also be included in the system to make it more difficult to hack into an account.
* Any problems, flaws, or faults with the website should be reported to the system promptly so that it can be fixed as soon as possible.

#### 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?*

* Users will be able to be added and removed from the system without having to update the code.
* As the demand for further features arises, the system will be gradually integrated into platform updates. Platform changes will commence as soon as Driverpass decides to introduce new functionality to the website.
* The IT administrator will have full access to the system and will be able to make any necessary adjustments or delete previous employees who no longer need access.

#### 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?*

* To log in, the user will need a username and password, as well as multifactor authentication.
* The data communication between the client and the server will be handled by the cloud.
* To prevent brute force assaults, the system should terminate the account after four incorrect logins.
* If a user forgets their password, they will be asked to provide their email address, and a password reset link will be given to that 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 book reservations when made by the user.
* The system shall provide practice tests, and classes.
* The system shall show the driver the customer is paired with.
* The system shall offer three different driving packages.
* The system shall run fast and efficient.
* The system shall provide custom access based on the user and their privilege’s.
* The system shall show the tests and work the user has already completed.

### 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.)?*

* Customers must be able to make bookings for driving appointment packages, as well as take online classes and tests, through the interface.
* Employees of Driverpass must be able to log in and make changes, as well as update the system as needed.
* A mobile phone, laptop, computer, or any other device with an internet connection should be able 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?*

* For the system, we were not provided a budget. As a result, we're assuming that everything we'll need to develop the system will be covered by the budget. These covers working in a Linux environment as well as utilizing the cloud.
* We also take for granted that we will have easy access to all of this technology.

### 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 only have about five months to construct this system and no budget.
* More workers to create the website, I believe, is a key limitation we face right now. More personnel are needed to complete the website within the five-month deadline.
* As a result, I believe that taking an agile strategy is the best option.

### 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