# 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 the project is to help people learn to drive since so many people fail.
* They want the system to be a website where they can book their tests and do lessons.

### 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?*

* They want their system to be accessible to everyone anywhere, but you cannot upload or modify data unless you’re online.
* This system is supposed to fix the issue of people failing driver’s tests.
* Online practice tests, online lessons, and ability to book a driver’s test should all be a feature within DriverPass.
* Security is a must: users should be able to reset their passwords and different users should be able access their own accounts.
* Tracking reservations, modifications, and cancelations, is a must so that in case something goes wrong, they can figure out who did it.
* There will be 3 different driving packages to choose from. Package One offers six hours in a car with a driving instructor, Package Two offers eight hours in a car with a driving instructor with an in-person lesson, and Package Three offers 12 hours in a car with an instructor and an in-person lesson with an online class too.

### 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 be a functional website that customers can use. They should be able to book driving tests, access lessons, and cancel lessons as they please.
* The system needs to be ran over the cloud.
* Online classes and practice tests should be able to be taken also when the system is fully ready.
* Developers will have special access to certain things that the customers cannot access like making changes and updating modules on the system.
* The DMV will be notified when there are changes in the system.
* A Gantt chart should be used to stay on task so the system can be deployed on time.

## 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 run on the web and is accessible on mobile devices.
* The system will need to be accessible with internet.
* The system needs a cloud storage system.
* The system should not be slow and lagging.
* The system should be updated regularly with updated lessons and DMV rules.
* The system should have appointments updated in real time.

#### 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 needs to run on all platforms like Windows, Mac, Linux.
* The system should be accessible by internet anywhere.
* There should be a database with user profiles and information.

#### 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 get to choose a username that is unique and a password for the account.
* Multi-factor authentication will be implemented, and the input will be case sensitive.
* The system will send notifications to the admin of any issues.

#### 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?*

* Changes to users can be made without modifying the code.
* To add or remove components, the developers will be the ones allowed to this only.
* The IT admin is allowed full access to all accounts so that they can manage password resets and block access.
* IT admins are also in charge of maintaining and changing 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?*

* A user must have a unique username and a password to login.
* A user needs to have multi-factor authentication to access the account.
* The cloud will deal with the data exchanges.
* After 3 attempts, the user accounts should be locked if the user is unable to login. The user should be notified via email or through text if someone is trying to access their account.
* After 2 attempts, the admin accounts should be locked if unsuccessful in logging in. The admin should be notified via email or through text if someone is trying to access their account.
* The user could reset their password if they forgot their password. An email will be sent to be able to reset.

### 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 the user when logging in by username and password.
* The system shall have 3 packages a user can choose from.
* The system shall allow for users to book, cancel, and modify reservations.
* The system shall track all reservations.
* The system shall include all online classes and practice tests.
* The system shall track the user with their instructor, the time, and the car.
* The system shall be connected to the DMV website to keep policies, practice questions, rules, and procedures up to date.
* The system shall create reports and allow the reports to be downloaded.

### 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 needs to be able to show the user heir test progress, user information, and the user’s photo.
* The user needs to be able to see all 3 packages.
* The user needs to be able to enter payment information.
* The user needs to be able to book, cancel, or modify reservations.
* The user needs to be able to access the practice tests and online classes.
* The admins need to have the ability to modify reservations and customer information.
* The interface needs to have a contact page for the company in case of inquiries on issues with the platform or for questions.
* The user needs to be able to interact with the interface on any OS and mobile with an internet connection.
* The admins should be able to see customer information.

### 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?*

* Users and admins have a stable internet connection.
* Users and admins have a mobile device and/or a computer.
* All components of the system will be within budget.
* The web browsers the users and admins are using are all up to date.
* The server will support an unlimited number of 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 cannot work without internet.
* The system cannot work without power.
* The time it will take to build the website is short.
* Users cannot see notifications until they log in.

### 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.*

*Timeline

Description automatically generated*