# 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 a new company looking to help new drivers pass their driving test the first time. They want to be able to make lessons and practice tests easily accessible to their customers. Also, for their employees to be able to leave notes for other employees to see. They would like to have a web based and mobile based application.

### 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 to be able to access information online and offline
* Would like to be able to have full access to change things if needed
* Needs scheduling tool to match drivers and customers
* Different packages available and needs to be able to disable if needed
* This will be on a cloud-based server, so that security and back-up doesn’t have to be bothered with

### 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 provide with the following functions when done
  + Scheduling driving packages as well as being able to modify and cancel
  + Disable packages
  + Change account passwords and revoke access if needed
  + Clients will be able to take practice tests and online courses
  + Check progress
  + Download reports to be able to work offline

## 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, so it can be accessed over the cloud
* The system should be fast enough to load, so the custom can go through it without issues and complete trainings without too much lag.
* The system should have continuous updates, so when a customer makes a change or an instructor updates a student log, the system is updated right away so everyone has access to it.
* For software updates, it should be checked monthly t ensure everything is functioning properly and if not, it should be addressed in a patch.

#### 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 cross platform compatible so anyone can use it on any platform. For ease of use for the backend, the main program will be built on Windows.
* The system is using the cloud for security.
* Databases will be managed by the cloud servers, so nothing will be required on our backend.

#### 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 enters the system for the first time, they will create their own unique username and password. Admin will have access to this on the backend.
* The input will be case sensitive, to give a higher level of security.
* Each time there is a problem the admin should be notified as soon as possible. This way it can be addressed right away or set on a priority list if multiple issues arise at the same time.
* There should also be a prompt for the user to send in a notification if they encounter 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?*

* The user will be able to make changes without changing the code. For instance, adding or canceling appointments, updating user profile, and so forth.
* Since the system is running on multiple platforms the adaptions will come from software updates when they are released.
* Since it will be running on multiple it would be best to release updates in small batches instead of large updates so things can be properly tested.
* IT Admin will have full access to the system. They will be able to modify things in the system like adding and removing users. Resetting passwords things of that nature.

#### 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?*

* User will need their unique username and password din order to access the system.
* Since the cloud server is being used, they will manage the security between the data exchanges.
* A limit of bad attempts to get into the system will lock the account and require assistance through IT t gain access again. The account lock out will help divert any “brute force” attacks.
* There will be a multifactor authentication process if the user clicks the prompt for forgot password. This will include an email with a link and a text passcode to change.

### 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 provide practice tests and classes.
* The system shall offer different packages for practical driving practice with instructor.
* The system shall set up reservations made by the user and change instructor schedules to show not available.
* The system shall allow drivers to update customer data sheets.

### 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.)?*

* Needs to be an option to make the reservations
* Needs to be an option to select the appropriate package the user wants
* Needs to have process for the user to take the online classes and tests.
* For multiple platforms, should have the ability to access computer and mobile devices.
* Needs to have a function that allows the Drivers to go in and make updates.

### 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?*

* Assuming that everything is going to be possible with the budget that the client gives us, because it was not discussed. Only needs and wants were discussed.
* Assuming all users have access to a mobile device for the multifactor authentication if the password if forgotten.

### 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 time constraint without budget is a concern.
* Limited in the use of the system because we don’t have control on updates to the platforms themselves, so if one of them updates it could potentially change the timeline for the design and launch since we are going for cross platform design.
* Limited by the DMV rules and regulations as well, we have no control over those so need to ensure it is always matching their rule changes and updates.

### 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*