# 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?*

* Client: DriverPass
* They want to develop an online and in person training system
* They want to train students to pass driver exams using the system
* They need the system to be compliant with DMV standards
* Track progress
* Scheduling
* Available online, desktop or mobile

### 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 train students to pass driver exams
* People are having trouble passing their exam at the DMV
* The system would have two main components to achieve the clients goal
* Online lessons and in person driving lessons
* Online lessons would be structured like a class with practice tests
* In person driving lessons would utilize a trainer for test practice
* The client needs a way to track progress for students
* There needs to be a method for scheduling with in person practice
* Available on multiple platforms
* Cloud based system

### 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?*

* Can students access online lesson material on multiple platforms?
* Is the UI setup in a way the meets the clients’ needs and is appealing to students?
* Do students have profiles that contains all their information?
* Can students make, change, and cancel reservations?
* Is the cloud-based system meeting the client’s needs?
* Is students’ progress trackable and updated during progression in training?
* Are proper security measures in place to protect students’ information?
* Is the client able to modify what programs are available to students for registration?

## 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 run using a web-based environment.
* The system will need to perform at fast speeds.
* The system needs to be able to meet the demand of having multiple users accessing the system at one time.
* For security and performance purposes the system should be updated regularly.

#### 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?*

* For a web-based system a platform like Chrome would be suitable for the application.
* A database would be need for the application, this could be one developed in house, or a Cloud system supported by a third party could be used.

#### 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?*

* Users will be required to create accounts using their email and a password.
* Input will be case sensitive.
* The system will notify the admin if either the user requests a password change or if a set number of failed login attempts is reached.

#### 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 IT admin will have complete access and required permissions needed to complete their job.
* Yes, it will not require any changes of the code to update the user.
* The system will be built with the intention of growth and future updates.

#### 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 login the user will need to input their email and password.
* We will utilize protocols like HTTP to help secure the data exchange between the client and server.
* For an attempted “brute force” hacking the system will lock the account and notify the admin after three failed attempts.
* The admin will need to unlock the account and a password change will be required.
* If the password is forgotten a request can be made to change the password.
* A security question will need to be answered to verify the account before creating the new 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 require the user to login to access the application.
* The system shall verify the package chosen by the user.
* The system shall verify and store user information, Name, address, payment method, and other contact information.
* The system shall give the user access to the material from their selected package.
* The system shall allow users to update their information or change their package selection.
* The system shall stay connected to the DMV for updates and changes.
* The system shall stay updated for security and performance purposes.
* The system shall track progress and scores of students.
* The system shall require password changes to help with security.

### 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 user interface needs to work for a browser that can be adjusted for different screen sizes.
* The student will need to be able to access their profile and the material from their package.
* The Admin and IT team will need to be able to access student profiles and be able to perform updates and maintenance to the system.

### 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 students have internet access and some way of accessing the application, pc, tablet, or phone.
* We are assuming that language will not be a barrier for students.
* We are assuming students have access to a vehicle to test in after completing the program.

### 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?*

* Students will be using their own technology to access information and its unknown exactly what type or model year they will be using.
* The project has a timeline for completion.
* No budget was set for the project.
* Students can’t be provided with a standard vehicle to test in.
* The DMV can make changes and require updates to stay compliant.

### 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.*

