# 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 this project is to provide driver education.
* The client is a new company called DriverPass who wants to offer online classes, practice tests, and on-the-road training to students who are trying to obtain a driver's license.

### 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 has identified a problem with the percentage of people who pass their DMV driver tests.
* They believe that their proposed education system will increase the number of students who pass.
* They plan to do this by teaching online courses about the laws and requirements of the DMV as well as giving on-the-road driving lessons.

### 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?*

* Data needs to be accessible online.
* Data needs to be downloadable to work with offline.
* Students need to be able to sign up online.
* Students need to be able to make appointments for driving lessons either by themselves online or by contacting the admin.
* DriverPass needs to be able to access their data online and download it to work with offline.
* Customers need to be able to sign up for packages and schedule driving lessons.
* The secretary should be able to make appointments.
* Customers should be able to make, modify, and cancel appointments.
* When registering for a lesson, the system should ask the user for the information as well as the location.
* The system needs to access the DMV requirements and send a notification to Driverpass whenever there is an update.
* The system should track the tests that the student has taken.
* There should be a space for driver’s notes and another space for student’s information.

## 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?*

* System needs to run in a web based environment. This would be chrome and firefox and more and make sure they remain compatible.
* System should run with a pleasant speed for a user. A delay for anyone is not acceptable, but most users will not notice short delays.
* A patch should be available for the system when there is a new bug found. This also includes the compatibility for browsers as well. The large updates happen when new features accrue and the system should be able to handle that.

#### 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 will be serving all major platforms Mac OS, Windows and Unix.
* The backend will have a database that will be used to store all information that the system will need. This would be the logins for members and staff. Also schedules, cars and locations.

#### 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?*

* Username and password will be used as a combo to distinguish each user
* Database will have a unique key to identify the user
* Username and password will be case sensitive. In turn this will make the system more secure since there are more options now.
* If the system suffers problems they should notify admins when there is a security breach or outage. A user's concern and unusual behavior that is noticed by one or more.

#### 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?*

* To be able to change users without changing code.
* Users can create an account for themselves. It will be added to the system and they will be able to modify and delete their account.
* Admins will be able to remove users They should be able to modify more than a default person can do.
* Systems will be able to keep up with platforms and adopt code from the responsive design.
* IT admin should have all these functions like being able to manage users, adjust performance settings, deploy updates. Manage the database and address security concerns.

#### 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?*

* Username and password are needed to login
* Server and client will use the Https protocol to make it secure.
* System will respond to brute force attacks and lock accounts and notify the admin.
* Users can request password reset sent to verified email.
* Users can contact admin and provide identifying information to change 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.”*

* System shall validate users' credentials for logging in.
* System shall provide training modules that will educate users on driving laws.
* System shall give the ability to schedule driving sessions.
* System shall track users progress
* System shall show practice exams
* System shall give users and admins the ability to add, remove and modify accounts without changing the code.
* System shall show a way for a user to contact admin for concerns
* System shall provide a secure connection between client and server
* System shall notify admins of any potential security issues.
* System shall keep current support for all browsers.
* System shall keep current support for all platforms.
* System shall be updated whenever necessary.
* System shall have reasonable response time
* System shall ensure 99.9% up time.
* System shall have a design that works well with various devices.

### 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.)?*

* Interface needs to be easily used with appealing visuals.
* Different users are admin teacher student
* Students need to be able to make accounts, update profiles, access learning material and take exams. Then view feedback and progress and be able to schedule driving sessions.
* Admins need to be able to delete,create and modify accounts. They need to be able to change the programs and be able to monitor the system. Then be able to take security measures. Have a place to resource security concerns and other users' needs.
* Teachers need to view,enter grades and give feedback to students' works. Then be able to see and schedule driving availability
* A browser should be used for a user to 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?*

* This design does not have all the outlying security and connectivity issues that could arise.
* Design is to make it where the user assumes that they can use a browser to access the system
* Design assumes that they have good internet
* Design assumes the user knows how to use a web browser and navigate around.

### 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?*

* Limit based on the number of teacher
* Getting updates done is dependent on have resources for it
* Time is the last limit since there is only so many hours in a day

### 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.*

