# 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 wants to give student drivers better resources for learning to drive, with a online scheduling and access system to training, practice tests, and service packages

### 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?*

* The system will allow for managing, scheduling, and status updates for student driver practice sessions, as well as personalized feedback from trainers.
* The system will provide access to all parties involved, with user access for staff, developers, and the business owner.

### 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?*

* Build and maintain a web and cloud-based system.
* Display available service purchase packages and provide ability to administrator to change and disable what is displayed at any time.
* Allow users, secretary, or administrators to create and schedule appointments with trainers.
* Allow users to reset or change password on demand from password change screen.
* Allow users to register with their personal information, including contact and billing information, and generate a unique account number.
* Give administrators control over all user accounts and allow them to disable accounts as needed at any 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?*

* System must be cloud-based, with ability to be run as a web application on any platform.
* System must be updatable as needed, from backend developer functionality to specific user input at interface level.

#### 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 cloud-based. Likely, the system will be run at base level with Unix.
* The backend of the system will need appropriate database capable of storing user data, credentials, packages, user account information and all transactional data.

#### 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 have a security role and clearance to perform specific functions within the system.
* The system shall notify administrator if any breach of security occurs within the system in real time; if any security role is compromised or if unintended access has been granted outside of security parameters.
* Input from users shall be case-sensitive.

#### 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?*

* User data shall be updated or changed without a need to change or restructure system code. This includes administrative ability to add, remove, or modify new or existing user data at any time.

#### 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?*

* Users will be required to create a unique username and passwords of adequate strength.
* Users will be allowed a set number of attempts to login. Afterward, the user must contact the secretary or administrator to regain access.
* System will allow users to reset password, but only in username or email is given, after which user will be directed to secure password reset page. If user does not have access to email, an option for unique security code can be sent to the user via text message, in which case a new password must be set.
* All connections outside of server shall use HTTPS.

### 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 at login.
* The system shall allow users access to and ability to update their personal account information.
* The system shall allow users to view, browse, and purchase service packages.
* The system shall allow administrators access to user accounts, and give administrators the ability to change user account information and control user accounts, as far as adding and removing users from the system.
* The system shall give administrators the ability to remove or hide access to unavailable packages or promotions at any time.
* The system shall allow a set number of login attempts before locking users out of the system.

### 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 will interact with the interface via web browser, or future app developed with capabilities and functionality concurrent to the web interface.
* The user will need to be able to access all areas of functionality pertinent to user-initiated functions, including but not limited to appointment scheduling, package purchasing, classes, practice-tests, trainer feedback, and user account information.
* Administrators shall have the ability to perform user functions from the interface at any time.

### 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?*

* The company assumes that users have access to modern web browsers with capable internet connection speed.
* The company assumes that the system will have adequate server functionality and will meet system demands with adequate storage, including database capabilities.
* The company assumes that the system will have access to cloud-based connection and functionality that will be capable of providing consistent access to the system and its users.
* The company assumes that all user accounts and system functions will be accessible and maintained by administrator staff.

### 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 company is currently limited in platform and device accessibility, which will be necessary to build upon for growth in the industry.
* Innate and inherent limitations that will manifest for a new and growing company. These will be viewed as opportunities for growth.

### 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.*

