# 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 DriverPass feels that they can take advantage of a void market for helping ensure people pass their driving exam due to a lot of people failing it initially.
* The client wants to create a system that allows users to better prepare to pass their driving exam due to a lack of this type of system.
* They want to provide users with online classes and practice test, also on the road training as well.

### 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 client wants a system that will help users prepare for their driving exams by offering different types of packages and allowing users to interface with a website to book appointments and track their progress.
* By doing this the client feels that they can help more people pass their driving exams
* We will need a client-server type architecture for this system as the client wants this be accessible from different platforms
* A database will be needed to store all information
* Role based user authentication for security
* A server platform will need to be chosen as well to support this 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?*

* The system should allow the client IT admin to be able to manage the system from a master role perspective. The IT admin wants to be able to monitor all changes and activity on the system, and reset passwords, track all appointments and changes made to them.
* The client wants their secretary to be able to book appointments by interfacing with page that asks for all necessary information. (i.e. First Name, Last Name, address, phone number, state, credit card information etc.)
* The client wants a website for users to interact with to be able to select driver exam training packages. They should be able to book, modify and cancel appointments. They also need login information and to be able to reset their password.
* The website should also track progress of the users test with a pass/fail, in progress indicator
* The client also wants to ensure that they can remove and add packages as needed.
* The client wants minimal technical aspects such as updating the system, and security administration, these need to be handled by cloud services.

## 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 shall be a web-based
* The system should run quickly and use buffer times when requesting and storing information
* Buffer times will eliminate dependency on the client’s hardware
* The system should use the cloud for its data base, and features to eliminate the client from having to update/maintain the system and data base.

#### 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 web-based only
* No mobile based application, must download compatible browser (chrome, firefox, etc.)
* It should run on linux servers, using a client-server pattern
* The system should be cloud based, and will require a database
* The admin will be unable to remove/add package modules in the initial build

#### 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?*

* The system shall have a user class in which the different type of users will inherit
* There needs to be an Admin, Secretary, and Customer user types
* The system will authenticate by user credentials such as email which can be associated with a username
* Input will be case sensitive
* The system should inform the admin of problems such as invalid user logins, changes made to the system regarding appointments (new appointments, cancellations, time/date changes).
* The system should inform the admin of who made changes.

#### 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?*

* Making changes such as adding/removing the various packages that are offered in the driver pass system will not be available.
* The admin will need to be able to disable packages
* The admin should be able to access the platform remotely away from office
* The admin should be notified when a system update is available and be able to administer the update or set up automatic updates.
* The admin should be able to modify users within the system such as granting access, removing user profiles, and administration resets.

#### 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?*

* Upon set up the customer type user info required for a log in should be name, date of birth, address, email and phone number.
* Personalized username and password, with the ability to block duplicates.
* Security questions for password/username recovery
* Password should be case sensitive and require a minimum of 8 characters with 1 special character and 1 number.
* Secondary authentication methods such as 2-factor authentication shall be used
* The server should limit login attempts to 3 to prevent brute force hacking
* The user should be able to automatically reset their password by verifying security information

### 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 allow the admin to pull reporting for system transactions
* The system shall allow the admin to disable packages
* The system shall allow for a secretary to create and schedule appointments for customers
* The system shall allow the set-up of user profiles that require personal information
* The system shall validate users’ credentials when logging in to identify the user type
* The system will allow users to set up and modify appointments, take testing, and track their progress within 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 interface will accommodate admins, secretaries and customers.
* The admin should be able to pull reporting, reset passwords, disable packages, and overall vision of all transactions such as appointment schedules, drivers/student sessions, training progress.
* The secretary will need to be able to schedule driver appointments for all users, they should be to see their profile and personal information for scheduling purposes.
* Customers will need to be able to set up their account and create a login.
* Customers will need to be able to schedule and modify their appointments.
* Customers will need to able to track their progress of their program such testing results and completed programs.
* Each user will be interacting with the interface via mobile, desktop, tablet via the web in a web browser such as chrome or Firefox

### 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 system must interface with other systems for validation of compliance with regulations
* Users will require authentication
* The system will be web based
* Not all features requested will be available in the first launch
* The system will be cloud based
* The system will not have a mobile application

### 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?*

* Some limitations will be budget since this is a smaller style business
* Certain modifications will not be able to be made without changing code
* The system will only be web based at launch
* The project will have a limited time frame for development

### 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.*

