# 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?*

* This project is for one of our clients, DriverPass.
* The purpose of this project is set up a system that offers comprehensive services to help train students to for the driving test at their local DMV.
* With this project, we will help our client will fill the void in the driver training as a service market.

### 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 has requested a system that enables customers to easily sign up and reserve time slots for their training services.
* The systems services offered will be delivered through online classes, practice tests, and on-the-road-training and will help the customer to pass the driving test.
* The system will include data storage and access to any device that is online and able to use a web browser for both the customer and the company.
* The system must run its backup and security through the cloud.
* The system must be non-developer friendly

### 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 will provide the user with the following functions:
  + Website
  + User profiles page with test progress, user info, lesson time, start hour, end hour, car, driver notes, special needs, driver photo, and student photo
  + User intake page with First name, Last name, Address, phone number, state, credit card number, expiration date, security code, and a pickup/drop-off location
  + Contact the company page
  + Password reset
  + Personal appointment setting and modifications
  + Online classes
  + Practice tests
  + On-the-road-training
  + Lesson pick-up and drop-off
  + Choice of three service packages
* The system will provide the company with the following additional functions:
  + Assignable roles, allowing different level of access
  + Package disabling
  + DMV update notifications
  + Access to modify all appointments
  + Information tracking and reports for reservations, cancelations, and modifications

## 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 DriverPass system will be a web-based application in order to offer driver training via online resources.
* The system will use cloud-based services to manage backup and security.
* The system has many user interactions points, thus needs to run quickly to keep user interested.
* The system will be updated frequently with new information every time the DMV changes any rules, policies, or sample questions.
* The system must remain stable for online access at all times

#### 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 DriverPass system must run on all major operating systems (Windows, MacOs, Linux…)
* The client requests that backup and security be handled through the cloud.
* The system must be simple enough for minimal technical problems and easy modification by a team of one (Ian)

#### 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 userbase will be separated into four different roles with varying levels of privileges. There will be the Admin, Backend Employee, Frontend employee, and customer roles that will account for all users of the system. Each user will have their own unique login credentials in the form of username and password (case-sensitive), that must be validated through the system before granting access. The system will only notify the admin in cases of disrupted service, otherwise the logs will have a report recording all errors to be viewed at any time.

#### 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 admin role, controlled by the head of IT Ian, will have full control over all accounts and logs. This includes the ability to revoke privilege to the roles listed above and to modify all information for each account. The admin will also have rights to modify the platform in case of any 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?*

* Because cloud services are being utilized by the system, security concerns will largely be the responsibility of the cloud service provider. Each user will need their own personal login credentials in order to login to the web application. The user must have an online connection and send their credentials via the login page on the web app. Here the credentials will validated and grant access for correct login credentials. The login page will also have a reset password button that will automatically send an email to the associated account with steps for setting a new password. The admin can also manually reset the password. In the case of a security breach, each user will be emailed a notice of the breach with the recommendation to reset their 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 validate user credentials when logging in.
* The system shall have separate roles with different privileges assigned to each account
* The system shall allow for phone, walk-in, and online reservation modification
* The system shall provide online access to users data at any time
* The system provide payment methods.
* The system shall provide information that complies with current DMV rules, policies, and questions
* The system shall keep a log of all account activity

### 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 system shall provide the customer with an interface with access to the following information:
  + Online test progress
  + Information (First and last name, address, city, state, zip …etc)
  + Special needs
  + Driver notes
  + Driver photo
  + Student photo
* The system shall provide the frontend employee with all of the above plus access to all customers reservations interface.
* The system shall provide the backend employee with all the above plus access to the system backend interface.
* The system admin shall have complete access to all accounts and interfaces and the ability to revoke privileges.

### 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 client has an IT team to help with system maintenance.
* The user has access to the internet and a valid email address.
* The DMV has updates to their rules, policies, and questions listed in the same place for every update.

### 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 system does not have plans for future features or growth.
* The DMV provides information needed for our system
* The system requires an internet connection
* The system runs on the cloud, so reliability is not under the systems control

### 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.*

