# 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(All one word), Liam(Owner),Ian(IT)
* **Purpose**-Client feels there is a need for additional driving training to supplement/augment the resources given by the DMV, to train up better drivers.
* **Want**- An online tool for practice test, as well as an online tool for reservations for their physical driving school.
* ]

### 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?*

* [
* **System-** The system must keep track of customers progress in online test taking as well as gather information for reservations that include financial information. System must be cloud based.
* **Problem**- They want additional online access to their services to simplify user access and data input . They have the services, they need the system to execute.
* **Components-** Several databases will be needed to keep track of customers information for both online and physical school as well as a DB for financial information. These databases will need tracking information so whoever makes a change will leave a trail. Security roles and access need to be assigned. An online host such as AWS can take care of back up and security.
* ]

### 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?*

* [
* System- The system should be able to register and administer online training for virtual clients. Progress and user information will populate their home screen. The system should allow for reservations to be able to be taken by phone, by DriverPass employees, or by users online. Scheduling, user information and billing information is to be stored in databases. All of this will be securely stored on the web with DP IT maintaining the database and CEO able to fully access any part of the system.
* Tasks-
  + Create Use Case Diagrams
  + Activity Diagrams for each use case
  + Research UI designs
  + Build class diagram
  + Customer Approval
  + Build Interface
  + Link DB to Interface
  + Build business Logic
  + Test System
  + Deliver System
  + Sign off
* ]

## 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 software and entire supporting system will only be web based. There will be no local software required and there shouldn’t be. The nature of the service dictates that this must be accessed online, whether PC or mobile. Appropriate resource management should make this system able to be run near instantaneously on a mobile cellular connection at worst, and even more stable on network speeds. Will need additional input from the developer to balance the the need for instant updates, vs bogging down the system with update request. As close to immediate without affecting system performance is desired.
* ]

#### 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?*

* [
* This should be able to run on all major platforms including Windows, MacOS, Linux, iOS, Android. We will need at least one main database to include several tables for system information and customer information including, customer demographics, billings, history, reservations, and updated info from the DMV.
* ]

#### 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?*

* [
* User will have unique and password protected log ins. Case sensitive is more secure and gives a wider variety of password combinations, but we are opting to not utilize case sensitivity for the ease of the users login. Some common communications to the administrator would be excessive password attempts that fail, expired credentials in billing or DMV information, reservations alerts.
* ]

#### 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?*

* [
* Yes, the administrator and designated employees can make changes to the users without needing any coding. As well, users can edit their information in their profile with no security role, other than a user. Because this is a web based solution any updates will not need to affect local systems, other than being tested before release. Users will not have to update any sort of app, simply keep their browser up to date. IT admin should be able to fully take the keys to the house once the project is complete, able to edit and update any part of the system as needed.
* ]

#### 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 need a unique user name and password. We’ll utilize industry standard Secure Sockets Layer(SSL) for encrypted sessions. To prevent brute force hackings we will limit the number of attempted logins and first time device access will utilize a captcha. A simple password reset plugin will be used for users who forget 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 display a prompt/ log on screen for the user to securely log in
* Once logged in the system shall display the users unique information including: Online test progress, demographic information, notes from their driving test, a photo of the user, the logo of the company, any special needs, and reservation times.
* The system shall allow for online reservations for the physical driving school
* The system shall allow and keep track of online test and scores
* The system shall display a “Contact Us” page
* ]

### 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.)?*

* [
* Display of user information is very important. They need to see their progress and reservations. The user will also need to be able to type in their information such as demographic or reservation preferences. This will be text boxes. Some boxes will have value locks for standardization, such as date of birth or address. This outward facing interface is for the user of the DriverPass service. Internally a UI is needed for the non IT employees to update and access user information and reservations and test scoring. All access should be over web through a browser.
* ]

### 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?*

* [
* Assume that all user have access to a network at all times for notifications and access.
* Assume that we can receive updates from the DMV for new laws
* Assume that users won’t steal and copy the online test portion.]

### 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?*

* [
* Limitations will eventually be maintaining user information. This seems like service that is used once and then never again. There will be a lot of aged data that may or may not be needed to be accessed in the future. Archiving may be best. The budget will need to include monthly fees for web hosting and security and the prices will only ever rise. New operating systems may emerge and need to be coded for.
* ]

### 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.*

*A screenshot of a project schedule

Description automatically generated*