# 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
* Create a system to help with new driver education through:
  + practice tests
  + online classes
  + on-the-road training.

### 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?*

* Should be able to access data from any computer of mobile device while online
* Download reports
* Have different levels of security
* User tracking for changes made
* Take reservations from clients
* Driver profiles needed
* Car profiles needed
* Student profiles/accounts needed
* Reservation calendar available
* Include driving packages that are editable by DriverPass Boss
* Notify DriverPass when DMV requirements are updated
* System should be web based, preferred to be over the cloud

### 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?*

* Collect Requirements
* Create Use Case Diagrams
* Build Activity Diagrams for Each Use Case
* Research User Interface Designs
* Build Class Diagram
* Build Interface
* Link DB to Interface
* Build Business Logic
* Test System
* Deliver System

## 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?*

* Web-based (website over the cloud)
* Fast enough for users to access the system without complaint
* Updates should occur as often as the client needs new features added

#### 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?*

* Run on Linux
* By using a cloud-based platform, security and required databases are already satisfied

#### 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?*

* Users will each have distinct usernames and passwords
* Passwords should be case sensitive
* Add multi-factor authentication to increase security
* Issues with the should be sent to the admin immediately so they can be handled as quickly as possible.

#### 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?*

* System will be designed to make changes to user information without having to change any code
* Platform updates will be wrapped into updates done to add new features.
* IT needs full access to the system to make changes as needed, especially in regards to employee access.

#### 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 required to log in, plus multi-factor authentication.
* Cloud is responsible for all data exchange between client and server.
* Account should be disabled after 4 incorrect tries to keep from hacking attempts and require an IT override to reestablish the account
* Prompt for forgotten password will exist and send an email to reset 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 during login
* The system shall provide practice tests, and classes
* The system shall offer 3 different driving packages
* The system shall run fast and efficiently
* The system shall book reservations made by users
* The system shall show which driver the customer is paired with
* The system shall show the tests and work the user has completed
* The system shall provide customized access based on the user and their privileges

### 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 must allow customers to make reservations for their driving appointment packages, take online classes and tests.
* Driver Pass employees need to be allowed to make changes and update the system as needed
* The user needs to be able to interact with the interface from a desktop, a laptop, mobile phone, or any other device with internet connection.

### 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?*

* No budget was given so an assumption has been made that the called-out requirements are within the budget scope, including the Linux environment and cloud space used.
* The assumption is also being made that easy access to all of the technology required is available.

### 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 build time for this system is 5 months.
* The number of employees currently available to work on creating this system.
* Whatever our budget ends up being (this needs to be clarified before continuing, especially from a legal perspective).

### 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.*

Chart, waterfall chart

Description automatically generated