# CS 255 Business Requirements Document Dobbs

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 is DriverPass, founded to address the high rate of failure at the DMV for people trying to get their drivers license.
* They want us to design a system that allows students to access online classes, practice tests, and book on-the-road training sessions with the goal of becoming skilled enough to pass their DMV exams.

### 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?*

* DriverPass wants this system to fill this gap by providing comprehensive training packages that include both theoretical classes and practical driving sessions.
* The problem here is many individuals fail their driving tests due to a lack of preparation and practice.
* The goal is to build a robust system that supports online and offline data access, ensures data integrity, and allows for user role management and data tracking.

### 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?*

* Upon Completion, we want this system to allow for user role management so employees can have different levels of access. An offline feature so users can use the system offline as well as online, general tracking and reporting, DMV Integration so it stays updated on DMV training material, and a good-looking user interface that is easy to use.

## 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?*

* This will need to be a web-based application, accessible from any computer or mobile device (phone, tablets, etc).
* We want this to run smoothly and efficiently so we want quick load times and a little downtime as possible.
* As is the norm, we will provide updated to maintain the system’s functionality and it being updated.

#### 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?*

* So we would ideally want to have this run on multiply platforms like Windows, Mac, and Linux.
* The backend will require a database in order to best support the application.

#### 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?*

* It would be best for the system to notify the admin if there are an errors or problems.
* Inputs should be case sensitive whenever possible to ensure security.
* We want the system to have different roles for different users.

#### 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?*

* IT needs full access to everything to maintain and manage the system.
* User roles and permissions should be modifiable without changing any code. SO like a UI for it would be good.
* The system should adapt with no issues to updates. This may involve some good testing before pushing an update.

#### 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 need secure passwords.
* Data should be encrypted in transit.
* After so many failed logins, it should lock the account.
* May need a password reset for people who forget their passwords. We are human after all.

### 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 will have to validate user credentials when logging in.
* The system should allow users to book, cancel, and modify driving lesson appointments.
* The system should track and report user activities, such as bookings and cancellations.
* The system should ideally integrate with the DMV to receive updates on rules and practice materials.
* The system should allow different access levels for different user roles (like: admin, secretary, trainer, customer).

### 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.)?*

* A friendly UI that is easy to learn.
* Different roles may have different interactions with the UI.
* Customers will need to book, cancel, and view driving lessons.
* Administrators and secretaries will need to manage bookings and access user information.
* Trainers will need to view their schedules and leave comments on sessions.

### 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 users should have access to computers or mobile devices with internet connectivity.
* Users have basic knowledge of how to interact with web applications or a way to learn it on their own.

### 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 will not support real-time modifications to the packages by non-developers.
* Budget and time constraints may limit the scope of features in the initial release.
* The system's offline capabilities will be limited to viewing and working on downloaded data only.

### 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 computer screen

Description automatically generated