# 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 is DriverPass, they want their new system to be able to fill a void in the market in terms of training students for their DMV Driving test.

### 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?*

* A new user interface
* Cloud data
* Modifiable security access
  + Reset passwords
  + Full access over all accounts
  + Block access
* Tracking user input
  + Reservations
  + Activity reports
  + Identify and track which user is with which driver and at what time
* Registration database
* DMV Compliance

### 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?*

* User interface designed
* Cloud servers implemented
* Security designed
* DMV Compliance researched

## 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 browsers
  + Chrome
  + Safari
  + Firefox
* Phone Applications
  + Android
  + iPhone
* With all these variables, the system should be updated fairly regularly if only for security purposes but also to keep up with industry and DMV standards.

#### 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?*

* A Google Cloud server platform would likely be the most cost-effective and convenient system, with any applicable computers run on Windows for standardized maintenance.
* Databases required
  + User information such a username, password, profile information
  + A database to keep track of students’ completed classes
  + A database to keep track of who has been given their certificates.

#### 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?*

* Input will be case-sensitive.
* Users will have unique usernames and passwords
* The system will inform the admin based on the preset Google Cloud system standards.

#### 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 system will be able to make changes without changing code through the use of constructors.

#### 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?*

* Password and username is required for login.
* Password must be complex, with at least one number and one special character.
* In the event of a brute force hacking attempt, the password should be automatically locked until the user changes their password using a reset link sent to their given email.
* If the user forgets their password, a CAPTCHA and security questions will give them access to resetting it.

### 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 keep track of completed driving classes/lessons
* The system shall securely let users in thanks to their username and password.
* The system shall keep track of completed online tests
* The system shall include the pickup and dropoff location.
* The system shall allow the admin to disable any package.

### 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 UI will need to
  + Allow the students to take online tests
  + Keep track of students’ progress
  + Keep track of students’ information and any driver notes given for in-person lessons.
* The user will interact with the interface in browser and through a mobile app.

### 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 will be accessible to disabled people according to industry standards of accessibility and US government ADA standards.

### 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 must be maintainable.
* The system must be able to keep up with DMV standards.

### 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, timeline

Description automatically generated