# 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?*

* DriverPass wants to create a system that facilitates driver training services
* Their services should include online, offline, and on the road training services
* The system includes online and offline courses, account management, and scheduling

### 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 found over 65% of examinees failed their driving test, their program helps solve this
* System includes
  + Online practice tests
  + Cloud based reports to access anywhere
  + Role based controls for users employees
  + On the road training management with reservations and driver connections
* Must include secure and efficient service management

### 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?*

* Ensure security and privacy of data
* Track student progress and allow employee modifications of progress
* Must be web based for mobile and compatibility between operating systems
* Allow students to schedule and register online and in person
* Ability to scale and adapt for future features and additional student admissions

## 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?*

* Pages should load within a reasonable timeframe, sub 2 second
* Allow routine maintenance at a monthly interval without interruptions
* Cloud based web app would allow for compatibility and scalability

#### 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 relational database should be used and hosted on a cloud platform
* Must be compatible with all major operating systems including Mac, Windows, Linux, IOS and android

#### 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?*

* Roles and permissions would be assigned based on student, admin, and employees
* Passwords should be case sensitive
* Admins would receive notifications for events such as failed login attempts exceeded and server problems

#### 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?*

* Admins can enable or disable features easily
* Updates should go into effect without student disruption at non-peak hours.
* Admins should be able to add or remove users without altering code

#### 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?*

* An industry standard password with capital letters, number and special characters should be used.
* Passwords required to change in monthly intervals
* Using https would allow for secure data transfers
* Capcha or another human verification process could be integrated
* Accounts would be locked after 5 failed attempts
* Allow users to reset their password with email or 2factor authentication

### 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 shallauto generate reports detailing student progress
* The system shallvalidate user credentials when logging in
* The system shalllog all activities for debugging and user progress reports
* The system shallprovide updates for DMV policy changes
* The system shall allow customers to match with drivers for on the road training
* The system shallallow secretaries to schedule training and modify student details
* The system shallallow students to register, schedule and modify driving lessons and classes

### 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.)?*

* Needs to be compatible with web browsers and mobile applications
* Needs to have clear and intuitive user interface
* Needs to have role-based accounts for customers, staff, and admin
  + Customers ability to schedule lessons, track progress, access study material, and take exams
  + Staff ability to modify student information and schedule or modify appointments
  + Admins have complete ability to modify, add, remove features, users, or data

### 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?*

* Cloud services selected can handle load balancing and data storage
* Students have stable internet connection and basic web browsing ability
* Developers will create new features and fix bugs or errors that may occur

### 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?*

* Budget: Does the company have the resources to enable all the features and maintain the services?
* Time: The services requested may take a longer amount of time than anticipated on the development side
* The DMV updates and policy changes may not be well publicized and be difficult to find.

### 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 graph of a driver pass

Description automatically generated