# 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 purpose of the project is to provide training for students to help prepare them for their driving test
* It seeks to help students pass their driving test due to a lot of students failing
* The client is Liam, the owner of DriverPass
* The client solution is to have a system where customers can register for different packages where they have a designated driver and car to teach them the rules of the road

### 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?*

* Solve the problem of many students failing their driving test
* Wants the system to have the ability to be accessed anywhere to produce reports and records
* It needs to be connected to the DMV to automatically gather information and updates
* The system needs to have a security system
* Needs to have a database to store all data, records, and information.

### 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?*

* Able to have a security system with different users and roles with an owner role having access to everything and being able to reset passwords or block access.
* Able to see reservations and whoever modified them
* Customers can make reservations for each driving lesson and set a pickup location, drop off location
* Able to identify the driver that is matched with the customer and track which car and the time
* Need to be able to have different custom packages. These packages can be removed and added.
* The system must be able to send notifications whenever there are new rules, policies, or sample questions from the DMV.
* The system must be able to run off the web/cloud
* Students can view online test progress of the test that shows what’s in progress and all the test details such as name, time taken, score, status, and driver notes.
* Students can reset their password automatically.

## 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 program needs to run on the cloud
* The system needs to be extremely responsive and loads everything quickly for a seamless experience
* The system should be updated at least once a month
* The system should have routine maintenance at least twice a month to ensure full functionality.

#### 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?*

* The system should run on multiple operating systems such as Windows and mobile devices like android and iOS
* Needs a database to store all users and customers information, transactions, trips/reservations, and to track everyone who made changes.
* Needs to have access to the map for accurate pick up and drop off locations

#### 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?*

* Distinguish between users by an encrypted username and password combination
* The username is not case sensitive, but the password is.
* Inform admin of a problem when a user submits a ticket
* Inform the admin when the system becomes unresponsive
* Inform an admin when someone tries to login to an account too many times

#### 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 owner can add, remove, and modify different users
* Can not add or remove modules
* IT admin needs access to all accounts except for owners and to the software infrastructure
* The owner needs access to all accounts
* The system will be based on the cloud to make updates, backups, and security simpler

#### 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 the correct username and password to login
* Owner can reset passwords for employees
* Customers can automatically reset their passwords
* A notification is sent to the owner and IT officer/admin of an account that may be going through a hack attempt
* The account going through a hack attempt will be locked
* The customer will need to speak with the owner or IT to unlock account by verifying their information

### 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 download and print reports
* The system shall validate user credentials when logging in
* The system shall allow users to make, cancel, and modify appointments
* The system shall automatically reset a customer’s password if they forgot
* The system shall send notifications of updates of new rules, policies, and sample questions from the DMV
* The system shall be accessible from anywhere
* The system shall have different tiered roles for different users including Owner, IT, customers, regular employees, and HR/Secretary
* The system shall allow the customer to pick from three different packages
* The system shall explain what each package is to the customer
* The system shall give the option to disable specific packages once they become unavailable
* The system shall give the pickup and drop off location

### 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.)?*

* Different users will see different UI depending on their role in the system
* Different roles for the users are customers, employees, IT admin, owner, and secretary/HR
* The customers will be able to see their online test progress, any driver’s notes, the driver’s photo and their photo, and their information
* Test progress should include what test is in progress and the completed test
* Test progress should include test name, time taken, score, and status
* Status only has 4 statuses like could not be taken, in progress, failed, and passed
* The employees/drivers should be able to see all of their students and their information plus have the option to add notes to the students’ files
* The IT admin will be able to look at tickets submitted
* The IT admin will be able to look at the performance and reliability of the system
* The owner will be able to see all users and their information
* The owner will be able to download reports of the system, specifically the one that tracks users’ actions
* The owner will have options to delete, add, and modify different users

### 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?*

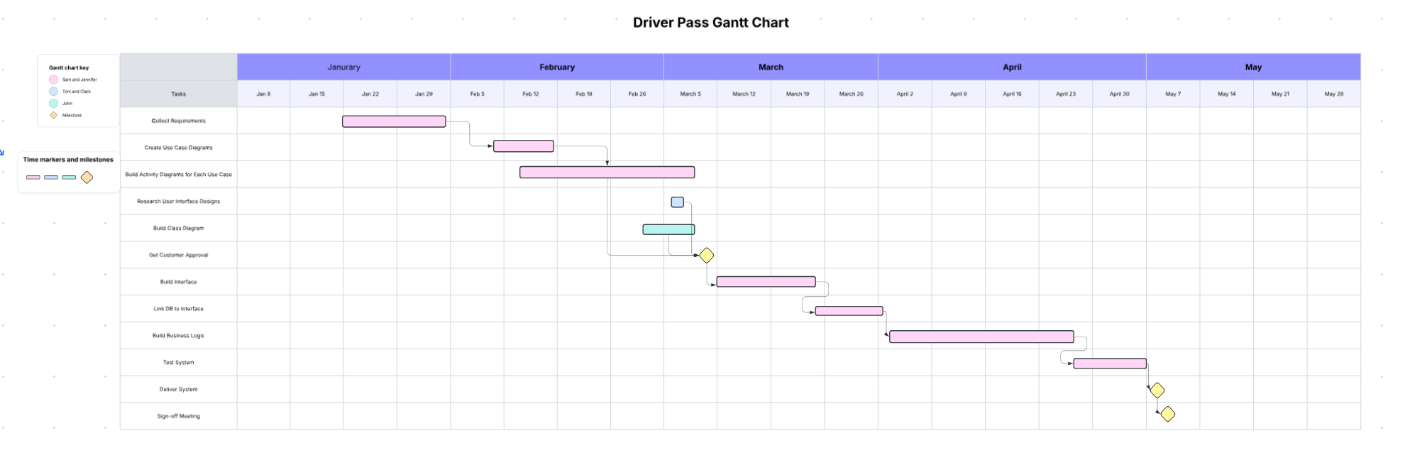
* The users have basic technical skills to navigate the UI
* The users have an up-to-date OS and their technology can run the application with no issues
* Users have a stable internet connection
* DMV can share updates

### 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 needs to be up and running in less than 6 months
* Admin cannot disable packages and would still need a developer
* Can not update database if the user is offline and when a user is offline, they can only read the data
* Need more money to build apps for iOS/Android and to be able to base it on the cloud

### Gantt Chart

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