# 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 assist students in passing their driving tests by providing:
  + Online Classes
  + Practice Tests
  + Provide a system for creating reservations for in-person on-the-road training
* Allow for customers to create user accounts
* Allow for different Users with different roles to be created – including Owner, Administrator, and regular users.

### 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?*

* Appointment management
* User management
  + Owner (Root Access)
  + Admin (IT Officer)
  + Secretary(user)
* Manage driver’s appointment schedule
* Provide Up-to-Date DMV compliant practice exams and online classes
* Provide real-time data access both online and offline through mobile and desktop

### 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?*

* Provide a rich User Interface for the user to observe their test progress, notes, appointments, and other relevant information about the user
* Allow users to create accounts, take practice tests, enroll in online courses, and make appointments online for in person on-the-road training
* Provide reports on appointment data

## 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?*

* Cloud-based web application
* Should be able to handle multiple users
* Mobile and desktop access
* Scalable

#### 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?*

* Backup and security shall be handled by the cloud service providers
* Linux based platform
* Relational SQL database shall be implemented

#### 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 are differed from the role and username
* Passwords for users are case sensitive
* Admin should receive alerts when any technical issues arise
* Admin should receive alerts when appointment records are modified, created, or deleted

#### 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 should be able to add/remove/modify users
* System must be scalable
* IT admin has full admin access for maintaining and modifying system in any extent

#### 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 are required for login
* Encryption shall be used to secure communication between client and server
* Brute force attacks shall be reported and monitored by cloud service providers
* Owner can reset passwords

### 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 when logging in
* The system shall book reservations when made by the user
* The system shall create a reservation record in the SQL database
* The system shall provide practice tests and classes
* The system shall show the driver the customer is paired with
* The system shall show three different driving package options
* The system shall run fast and efficient
* The system shall provide different access experiences based on username and role
* The system shall show the tests and work the user has already completed
* The system shall alert the admin when a new reservation is made
* The system shall connect to the DMV database

### 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 Admin user interface shall have a list of all the employees, students, and reservations
* The user interface shall be responsive on moble, desktop, and other devices
* The user will interact with the system over a web browser
* The user shall be able to observe their tests and test progress
* The user shall be able to use a form to create a new student
* The user shall be able to see a contact form

### 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?*

* Budget constraints are not outlined; thus, we are able to incorporate any technology
* Technology, we are assuming our Linux environment will not present any roadblocks along the way
* We are assuming we will be able to connect to the DMV database without any major hurdles

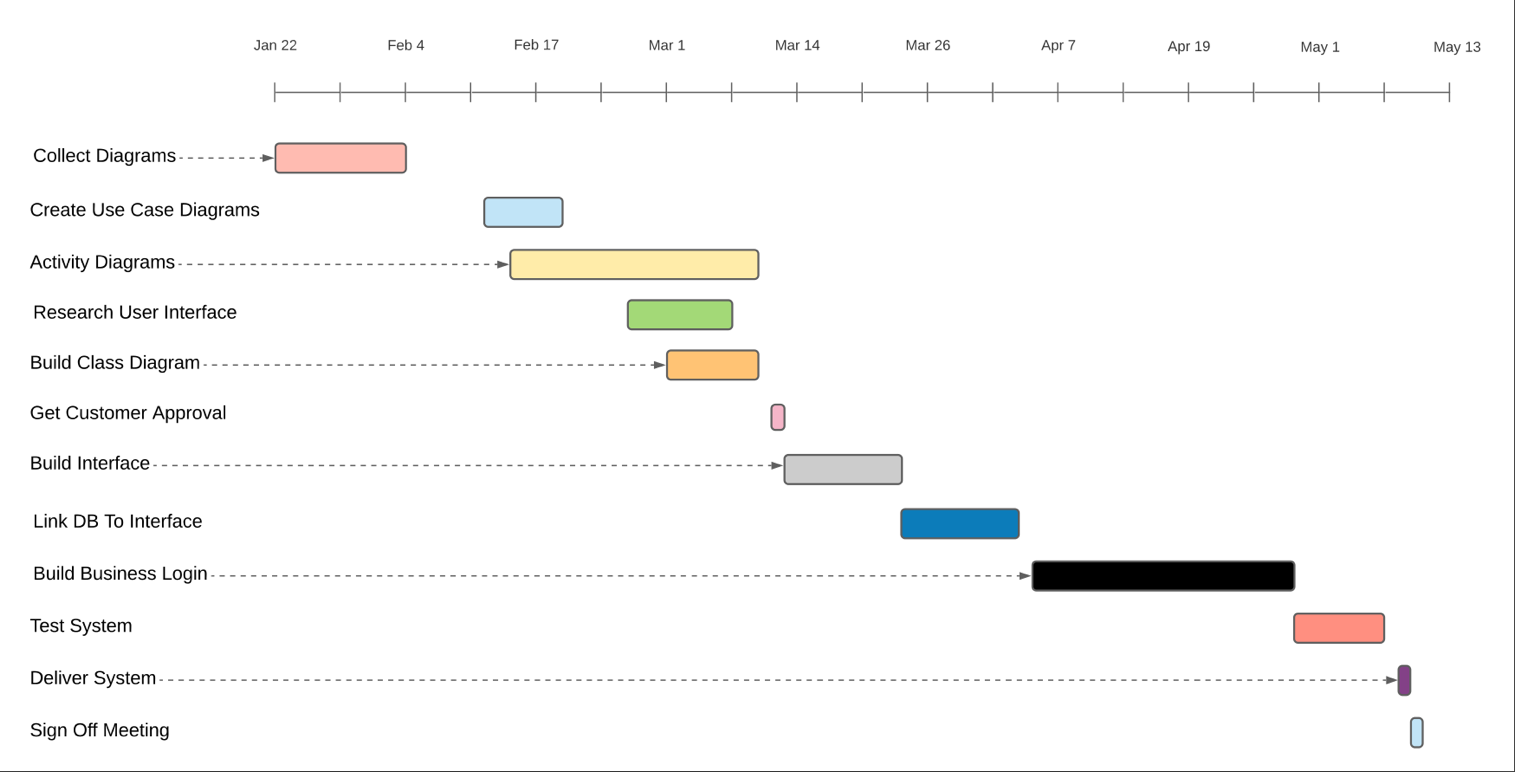
### Limitations

*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?*

* We have about five months to build and deliver the system
* We have a limited number of employees to build a system in about five months

### 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.*



Graphical user interface, application

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Diagram

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