# 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 this project is to build a web application for our client DriversPass. This web application will provide education to students working on passing their driver’s license exam.

### 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 web application to be able to maintain the driver lesson schedule, store customer accounts, and give customers access to online drivers course.
* This system will be a web application where users have access through the internet.
* Customer will be able to schedule driving lesson appointments and view their test status as well as online content.
* Administer users and secretary users will be able to schedule driving lesson appointments for customers who call in on the phone. Administers will be able to add and delete users and reset passwords.

### 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?*

* This web application will be able to handle the following functions
  + Maintain driving lesson schedule (create and delete appointments).
  + Create new accounts for new customers and store existing accounts.
  + Display customer test status.
  + Display education package options for customers
  + Administers can add/delete accounts and reset passwords.

## 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 System will be a web-application so it will need to be compatible with all major web browsers and operating systems. The system should run fast enough to appear that updates and submissions are processed instantly. The system will need to be updated any time that a user makes an appointment to prevent multiple people scheduling driver lessons at the same time.

#### 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 will a web based application so it will need to run on all Windows, MacOS and linux through web browsers. A data based will be needed to store all information, and a cloud based storage system will be used to avoid needing to set up any physical equipment.

#### 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?*

* The system will have a class called User that will have attributes for the user’s personal information. There will be several subclasses that inherit from the User class for each type of user. There will be a class for administrator, client and employee. The client class will be for customers and will be created when the customer makes an account online or an employee takes in their information. The employee class will be for employees and the administrator class for the owner, managers and the it manager. The input for user’s login information (password and username) and their email address will be case sensitive but names, and street address won’t be.

#### 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?*

* There will be methods in the user class that will allow users to edit the information in their own account. For example reset password, update personal information and for customers delete their account. The administrator class will also be able to reset a users password and edit information. Removing an account will just set the account to inactive in the case of a customer and mark it as terminated for former employees. The actual data will not be deleted due to record retention policies and will be stored for the proper duration.

#### 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?*

* Security will be handled by a micro service to avoid having to worry about setting up encryption. The user will be required to enter their username and password every time they want to login to their account. If a user forgets their password they will have the option to reset the password and create a new one. If they have issues resetting their password they will be able to call and after an employee verifies the customer’s information the employee will be able to reset the password.

### 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 have a user class for each type of user.
* The system shall maintain schedule for driving lessons.
* The system shall keep track of customers test progress.
* The system shall display online class content.
* The system shall give administrator users access to reset passwords and edit profiles.

### 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.)?*

* There will be three types of users which are administrator, employee and customer.
* The customer will be able to see information on the home page like their personal information, test progress, instructor notes on their driving skills, and photos of themselves and their instructor.
* The customer will also have a page for online course content.
* The employees will have access to schedule that shows all driving lessons.
* The administrators will have a page that will show all users and allow them to look up specific users.
* The administrators will have a page to edit profile information and reset users passwords.

### 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 user has electricity to power their devices.
* The user has a smart phone or computer the access web site.
* The user has internet with a fast reliable connection.
* The user lives locally.

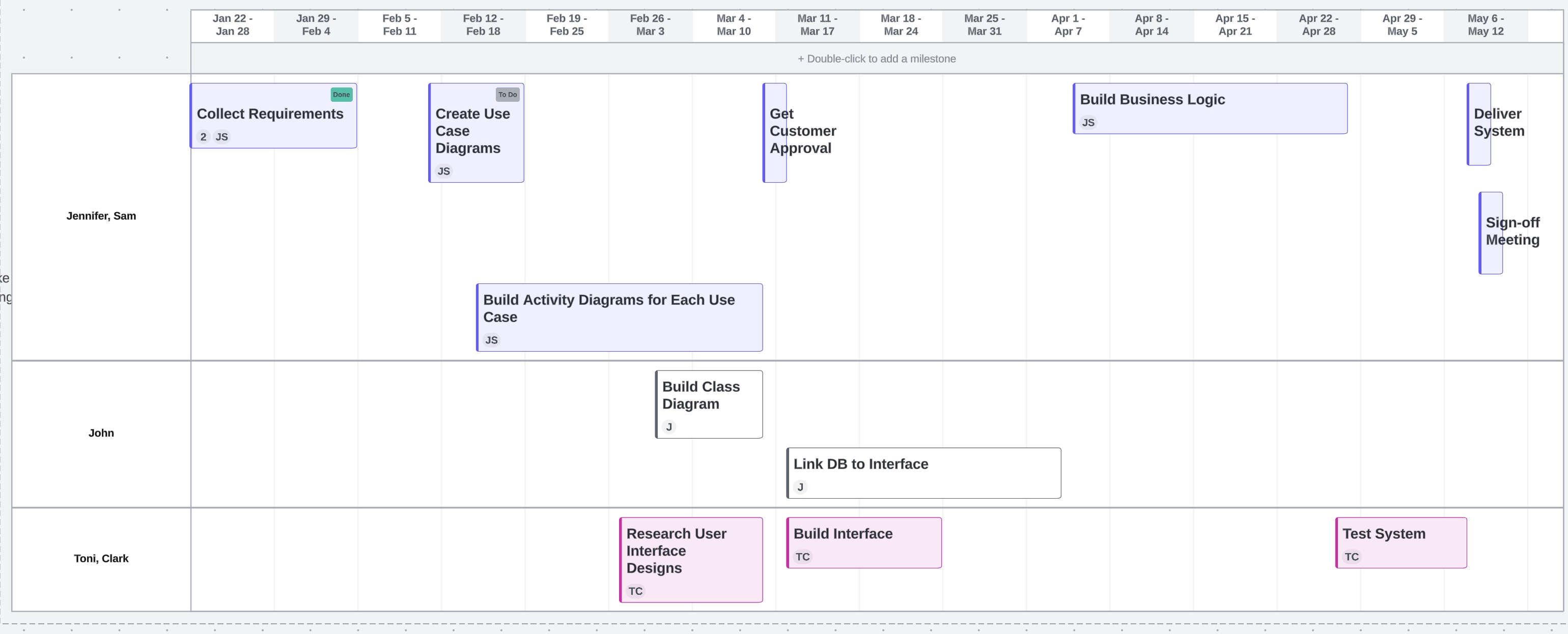
### Limitations

*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 won’t work unless a user has an account and is logged in.
* The user wont be able to access web site if they don’t have an internet connection.
* The user won’t be able to use service if they live out of state or in a different country.

### 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.*

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