# 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 create a digital platform for DriverPass, a ride-sharing company. The client wants a system that will allow them to manage their drivers and passengers, provide real-time ride tracking and payment processing, and handle driver and passenger feedback.

### 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 the system to provide a centralized platform for managing their ride-sharing services. The system should allow them to handle ride requests, dispatch drivers, track rides in real-time, process payments, and manage driver and passenger feedback. The problem they want to fix is the inefficiencies and lack of scalability in their current system. The different components needed for this system include a database for storing user information, a payment processing module, a ride tracking module, and feedback management module.

### 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?*

* Implementing a ride request and dispatch module that can handle a large volume of requests and dispatch the closest available driver.
* Integrating a ride tracking module that allows both drivers and passengers to track the ride real-time.
* Developing a payment processing module that can handle different payment methods and currencies.
* Implementing a feedback management module that allows drivers and passengers to rate each other and provide comments.

## 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 needs to run on a web-based environment. The system should be fast enough to handle a large volume of requests and dispatch drivers in real-time. The system should be updated regularly to ensure that it is secure and performing optimally.

#### 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 be designed to run on a variety of platforms. The back end requires a database to support the application.

#### 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?*

* Different users will be distinguished by their unique login credentials. The input should be case-sensitive to ensure accuracy. The system should inform the admin of a problem as soon as it is detected.

#### 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?*

* Changes to the user can be made without changing code. The system should be designed to adapt to platform updates seamlessly. The IT admin should have full access to the system for maintenance and troubleshooting.

#### 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?*

* The system shall require users to log in with a unique username and password.
* The system shall use encryption to secure the connection and data exchange between the client and server.
* The system shall lock the user account for a specified period after a certain number of failed login attempts.
* The system shall allow users to reset their passwords through a password reset link sent to their registered email address.

### 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 provide a registration process for new users.
* The system shall allow users to create a driver profile with their license information.
* The system shall allow users to search for and book available driving instructors.
* The system shall allow driving instructors to accept or reject a booking request.
* The system shall allow users to view their booking history and upcoming appointments.
* The system shall provide a rating and review system.

### 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 interface needs to be user-friendly and intuitive.
* The different users for this interface include driving instructors and users seeking driving instruction.
* Users will need to be able to search for driving instructors, view their profiles, and book appointments.
* Driving instructors will need to be able to accept or reject booking requests and manage their availability.
* The interface should be accessible through both mobile and web browsers.

### 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?*

* Users will have a basic understanding of how to use web and mobile applications.
* Users will have access to a stable internet connection.
* The system will be deployed on a secure server with the necessary resources to support the application.

### 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 may be limited by the number of available driving instructors in a given area.
* The system may be limited by the number of users seeking driving instruction.
* The system may be limited by the available budget and time resources for the development and deployment.
* The system may be limited by the technology used to deploy and host the application.

### 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.*

Timeline

Description automatically generated