# 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 provide better training for drivers/customers to raise passing scores. The client is DriverPass, they want their system to provide online classes for customers that allow them to make reservations for in person driving with an instructor, offering three different packages.

### 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?*

* Driver Pass wants the system to improve driver test scores so that more people will have a better chance at passing their tests. They found that there was a lack of proper in person training for people, so they wanted to offer this training. Components needed include an IT person, an overseerer, access to a computer, a clientele, access to the DMV to follow policy, a website, and advertisement.

### 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?*

* Offer customers an online platform to register for courses
* Pick between three packages
* Choose date and time for meet ups with the driver
* Track progress
* Take practice tests
* Enter in personal info and credit card information
* Enter in pick up and drop off location

## 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?*

* A web based environment in the cloud, needs to be fast, flexible, and responsive, requiring little maintenance, and updates should happen continuously even out of operating hours. The system should run at a pace where the screen takes milliseconds to load.

#### 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 requires a database, so something like SQL would be good with Linux as the primary environment. This allows more efficiency with minimal effort, and HTTP will also be required.

#### 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?*

* Can distinguish via emails by having employees and customers register with their emails. Admin should be notified if the system receives a runtime error.

#### 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 code will not need to be changed since a user table will be queried against the database, and updates should not impact the system a lot since the same data types are being used. Software updates should also not impact the system, and IT will not need access since the system should be manageable within the web UI. IT should still have access though, in a “all things lost” situation.

#### 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?*

* For the user to log in, the employees and customers will need a username (using their email) and password. To secure the data exchange, we can use the HTTPS protocol with a signed certificate from a root CA. If 3 failed login attempts pop up, user accounts will be locked with an email notification sent to them where they can reset their 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 identify users.
* The system will validate user credentials
* The system shall oversee data while logged in
* The system will cancel sessions after logging out
* The system will properly associate roles to the designated users
* The system will hold transactions purchased by customers
* The system will allow big boss to delete packages
* The system will record customer data such as first and last name, address, phone number, and credit card info
* The system will let customers reserve time slots for the packages of their choosing
* The system will let user role IT tech enable the reset of passwords and delete/block accounts

### 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 UI needs to be accessible on multiple times of devices. Thus, the following is required:
* For customers, they need to access course content, see their progress, schedule reservations, take practice tests, add personal information, pickup/drop off location, and credit card info, and can create a profile with their email and a picture.
* Employees of DriverPass need to see all information regarding customers, reservation times, which driver was assigned to the customer, driver notes, customer progress, DMV policies.
* Administrators need access to customer and employee accounts, the deletion of customer and employee accounts, the ability to remove and update packages, assign employee restrictions, and everything else seen above for employees.

### 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 expectation that customers have computer knowledge and skills
* Advertisement for the company
* Employee training on how to navigate and use the system
* A competent IT tech
* DriverPass will be solely responsible for the system after completion

### 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?*

* A code change will be needed
* Little time to create the system/little room for error
* What software will be used/is there a preference/restrictions when using that software
* What languages will be used and my knowledge of them

### 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 diagram with blue rectangles

Description automatically generated