# 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?*

* Liam is the owner of DriverPass. He wants to offer access to diverse training options to his clients
* To create a way for DriverPass to manage their schedule and track their students’ progress.
* The app needs to be accessible online from any device
* There is a need for accessible online resources that allow customers personalized packages for driving and DMV policies and rules.

### 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 application to be used by employees and customers. They need to be able to schedule their appointments.
* App will require a login for users to create and login to their account and be able to change their password if needed.
* We will need an owner, administrators, editor, user, etc.
* User roles needed like the ability to add, remove, or change reservations.
* App will need tracking/logging component to keep track of changes.

### 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?*

* App will be able to allow users to login
* Customers will be able to purchase a package from DriverPass.
* Employees will be able to schedule, cancel and change appointments for the customer.
* Employees will have access to see which driver, vehicle and time is needed for each appointment.
* Customer’s application will need their name, number, address, email, address, etc.
* Instructors will be able to leave notes on each lesson including the time, start hour, end hour, and 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?*

* Driver Pass will be a web-baes app hosted via the cloud
* App needs to be quick when returning information to users.
* Appl will need storage for the database and user-uploaded photos

#### 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?*

* Windows or Linux are recommended
* Windows come with tools to host web applications
* App will need to connect to a database to save and query user data.

#### 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?*

* User will have different email or a unique username. It will require a case-sensitive password and login.
* Admin will receive a notification when a user’s account is locked out due to too many attempts
* Amin will also receive a notification when a user forgets their password.
* If connection is lost on the app or database, admins will receive a notification

#### 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?*

* Customers will have the ability to edit/update their account information. Only certain employees will be able to update customers information.
* IT administrators should have access to customer’s information, create employee accounts, manage employee roles, and disable employees.
* Web application and database will be backed up, platform updates will not affect it.

#### 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?*

* To login into their account the user will need a password
* Send authentication emails when necessary, so no bot accounts can access information
* To receive and send data, developers must use HTTPS as the protocol.
* Daya transfer will be encrypted and safe to send passwords or any sensitive information.
* “Maximum attempts” implemented which will mitigate “brute force” attacks. Accounts could be locked in a certain amount of time or might need an admin to unlock it.
* When password is forgotten, user can reset it via email verification.

### 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 display the home page with information about DriverPass and the services they offer
* The system shall register users’ data
* The system shall validate users’ credentials when logging in
* The system shall allow customers and employees to reserve driving lessons, with their desired date and time.
* The system shall allow customers and employees to purchase a driving package
* The system shall allow customers take online practice tests and display it on their profile.
* The system shall contain a page that displays the customers online test progress as well as their information.
* The system shall query the database and generate reports for employees with allowed access to view.
* The system shall display current DMV requirements and give notifications to administrators with any updates.

### 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 user interface will be simple to understand for new and existing users.
* User will be based on roles, could be a customer, employee, administrator, or owner/manager.
* All users will register/login and reset their passwords.
* Customers will be able to purchase DriverPass packages, input their information, set their package type, and manage customer/driver schedules.
* Administrators can setup employees and their roles, get notifications for application problems, and manage the application.
* The owner will be able to create and access reports, view driver schedules, and view active users.
* The user interface will be dynamic and based on the monitor or device size.

### 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 will have access to a computer or mobile device
* The user will have internet access
* Users will have an email account to create a DriverPass account

### 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?*

* Users with slow internet access
* Limited number of instructors/vehicles
* Budget depends on what DriverPass is able to afford
* Enough time to complete tasks.

### 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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