# 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 client is a company named DrivePass. They are a company that provides drivers education to students. The owner of the company is Liam. The information technology officer is Ian. The company has ten driver teachers and a receptionist as well. The client wants the system to provided trainings for student’s driver’s tests.

### 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?*

* The problem that DriverPass wants to fix is the gap in the market for training for people studying for their driving test. Liam wants to provide better driver training since so many people fail their driving tests at the DMV. The company wants the system to be able to have online classes and tests for people learning to drive. They would like the system to also have an option for users to request on the road training via packages as well.

### 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?*

* For the objectives of the system, Liam would like it to be able to have online classes and practice tests, as well as providing on the road training if the student desires it. For the on the road trainings users can pick from three packages and should be able to make reservations online, over the phone, or in person at the office. The system should have the ability to disable packages. When the user’s registrars the system should hold their first and last name, address, phone number, state, a credit card number with expiration date and security code, and a pickup and drop off location. The system should be able to allow Liam access data from anywhere whether he is online or not. The data should be able to be downloaded into reports as well allowing Liam to work with the data using other systems, for example Excel. The system should alert the DriverPass team of any updates the DMV makes as well so the information stays up to date. The system should preferably be run over the cloud.

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?*

* Web-based cloud
* Users load times should be fast, average of 1-2 second.
* If the system takes over 3 seconds to load it should provide feedback
* The system should be updated whenever new guidelines from the DMV are posted or once a month.

#### 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 run on mobile and desktop browsers such as,
  + Microsoft Edge
  + Google Chrome
  + Safari
  + Bing
  + Firefox
  + And more
* The backend will require a:
  + Database to hold users and system information
  + And a web server to process request and to manage response

#### 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?*

* To distinguish between users they will need to log in with a username and password
  + Passwords will be case sensitive
* System should inform admin when users want to reset passwords
* System should produce activity report when problems arise i.e. database losing connection

#### 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?*

* Users should be able to update their personal data
  + Employees will also be able to update users’ personal data
* Admin should have access to users’ personal data and will be able to create, manage, and disable or remove employees accounts.
* When web application and web database are updated the platform should not be affected by the updates allowing users to still use the program.

#### 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?*

* Users need a case sensitive password to access their account
  + If password is forgotten users can request to change their password
  + After a number of attempts at the password the account should lock to prevent a brute force hacking attempt.
* Use email verification during user setup for resetting password and to avoid bot accounts.
* Should use the HTTPS protocol for sending and receiving data.

### 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 register new users when giving the need data (i.e. name, date of birth, credit card, email, etc...) and case-sensitive password
* The system shall display the DriverPass home page that has information about them and the services they provide
* The system shall have a navigation bar leading to other pages as well as a log-in/sign-up tab
* The system shall let users reserve driving lessons with dates and time
* The system shall allow users to take online practice tests and additional practice.
* The system shall produce reports based on user activity and other data
* The system shall allow access online and offline
* The system shall allow users to pick different packages

### 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.)?*

* Interface will be dynamic to fit many devices and monitors
* Interface will allow users to sign-up and log-in
* Interface will differ depending on user type
* Interface will allow employees access to create customer accounts and manage schedules
* Interface will allow customers to pick packages, update information, and study and take tests.
* Interface will allow owner to create and access report, schedules, and see active users
* Interface will allow admin to create employes and set role and get notification for application errors.

### 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 internet access
* The user will have a device that is able to browse the internet
* The user will have an email address to create an account
* The user can read English

### 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?*

* Slow internet connection
* Must be done by May 10th
* Not going over budget

### 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 screenshot of a calendar

Description automatically generated