# 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 DriverPass and they want to provide better driver training, so less people fail their driving tests.
* Driver pass wants to provide online training and offer in person practice with a reserved instructor.

### 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?*

* Many people fail their drivers test and DriverPass wants to solve that problem by providing online lessons, practice tests and personal driving time with an instructor.
* They want their students to be fully prepared and equipped with the knowledge and skills to pass the test on the first try.

### 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?*

* The system needs to let the user create an account with their first and last name, address, phone number, state, credit card number, expiration date and security code.
* The user must be able to access the lessons and practice tests and save their progression.
* The user must be able to book or cancel instructor time and the secretary or admin must be able to confirm the scheduled appointment or cancellation.
* When booking a user should be able to set a pickup and drop off location.
* The admin should be able to edit or remove package deals from the site.
* The admin should be able to reset passwords for those who are locked out of an account or revoke access to a user or employee.
* When a dmv makes policy changes the admin should be notified.

## 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 application running on cloud servers.
* The application should have 1-2 second load times to make the user's experience smooth.
* The web application should have updates every month to better security and better the user experience.

#### 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 database is required to store the user information, appointments, instructors available and user progress on the lessons.
* Application would need to run on major browsers
  + Chrome
  + Firefox
  + Edge
  + Safari
  + On any phone computer or tablet
* Back end server to process requests

#### 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?*

* Users will be differentiated with their unique login credentials, in the backend they will be assigned a unique ID.
* Passwords will be case sensitive.

#### 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?*

* With object-oriented code changes to the user status will not require changing code.
* The system should adapt to updates seamlessly.
* The admin needs access to the database and server.

#### 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?*

* Two factor authorization will prevent brute force attacks.
* After a number of failed attempts the password will need to be reset.
* Or the user could reset the password if they forgot.

### 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 verify the account type admin or customer.
* The system shall allow password resets
* The system shall limit the amount of log in attempts
* The system shall allow account creation with user information and credentials
* The system shall allow access from any web browser
* The system shall let users choose a package deal to purchase
* The system shall process payment
* The system shall let the admin edit packages and their status
* The system shall allow admin to track the driving lesson times and which instructor and student
* The system shall display to users and instructors date and time of a scheduled lesson
* The system shall not allow the instructors to be double booked
* The system shall display instructors and drivers notes
* The system shall display student and drivers’ photo for safety
* The system shall notify admins of DMV policy changes
* The system shall allow users to access the learning materials and practice tests

### 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 users of the interface are customers and admin
* The users will be able to interact with the log in or sign up
  + Home page
  + Study and test progress
  + User info
  + Driver notes and their driving lesson info such as instructor, time and date.
* The administrators
  + Info on the registered users
  + Purchases
  + Edit package deals
  + The instructor and corresponding students and their appointment information
  + Reset user 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?*

* Users will have access 24/7
* That they will have one of the major web browsers edge, fire fox, safari, chrome.
* That the users will know how to use the site
* That the users will not cheat on their tests.

### 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?*

* Only have around 4 and a half months to complete the project Jan 22nd – May 9th
* The speed of the system will depend heavily on the users internet speed
* Security and online availability is dependent on the web service provider which comes with pros and cons.

### 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 close-up of a project

Description automatically generated