# 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

* The purpose of the project is to provide an asset for students learning how to drive. The desire is to have online training and practice tests. Liam (the client) also wants there to be real life training assistance staff available as well. For the goal of reducing the number of people who fail the DMV driving tests and better drivers on the road.

### System Background

* They want the system to always have the data available and anywhere, including offline. The concern that was risen was about data redundancy if the ability to save data offline was given.

### Objectives and Goals

* Allow users to choose a package based off their needs for assistance but should allow for Liam to disable packages when it is already booked.
* The ability to provide drivers notes that Liam can see afterwards, and which includes the time the lessons were had.
* The ability to track which the pairings of driver and student and also the time of lesson and the car used.
* The students should be able to take tests online, that online test should show when a test is in progress and when complete. The format provided was test name, time taken, score, and status. The options for status should be not taken, failed, passed, and in progress.
* These are done through measurable tasks such as schedules which should show the drivers lessons and relevant information and tests which should be available to Liam both online and offline.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system should have regular updates to ensure security and quality.
* Web-based to ensure ease of access to customers.
* It needs a decent speed, nothing crazy efficient since this will mostly be a test taking and appointment booking site. Should allow for multiuser access without affecting performance.

#### Platform Constraints

* Windows would probably be the easiest since we plan to make it web based it already comes equipped with the necessary tools like web browsers and databases such as sql server if necessary.
* Website should be mobile friendly.
* All data should be maintained in a back-end database.

#### Accuracy and Precision

* Login security, such as 3 times incorrectly putting in password should lock the user for a set amount of time or alert administrators.
* The users should have a unique username or email that identifies that user on the front end, the back end they should have a user number that is tied to their account.
* The passwords should be case sensitive and have the standard requirements such as special characters and numbers.

#### Adaptability

* The ability to add and remove drivers from the availability list with POST requests.
* The ability to disable unavailable packages so that the customer may not select it.
* The ability to reenable a package so that the customer may select it.
* The use of controllers would also allow for more easy viewing and alteration of the database information.
* The admin will need to have access to these options on the application to be able to use the built-in tools that will be provided.

#### Security

* All users are required to log in. Credentials are based off of that login.
* Limited login attempts to prevent fraud.
* Reset password button for those who forget so that they do not get locked out of account
* Ensure up to date security on the database server and application servers
* Ensure secure HTTPS connection for secure data exchange

### Functional Requirements

* They system shall have confirmation of the customer choice of package
* The system shall allow the customer to switch packages
* The system shall allow users to schedule and cancel rides
* The system shall allow users to take DMV tests at the user’s discretion
* The system shall allow an exam history for the user to view to see past grades
* The system shall allow the user to fully enter and alter their personal information that is provided by them such as address and name.
* The system shall provide digital receipts over email when a transaction is accomplished such as a package purchased and when a ride is scheduled
* The system shall alert the drivers when a new session is booked and add it to their schedule
* The system shall allow the admin to disable unavailable packages, should visually show package unavailable on customer side
* The system shall have a login screen to validate user credentials
* The system shall be updated to match DMV standards

### User Interface

* Landing page with a login screen
* User Home page
* User information page where their personal information is entered and edited
* Exam page
* Exam history page to view past grades
* Scheduling page
* Notes of driving instructors
* A Contact Us page for further assistance
* Admins should also have a way to add in new drivers/cars
* Admins should have a way to edit the contents of the tests
* Admins should have a way to edit users such as delete or change.
* The interface should be mobile friendly

### Assumptions

* Customers are looking to pass DMV driving test
* That the application will be available 24/7 online
* That the test material will be kept up to date with current DMV standards and material.
* This application is expected to grow so it needs to be designed with scalable features.

### Limitations

* Number of available resources such as drivers or vehicles.
* Study material is only available from material provided for DMV, so it is a limited in quantity of study materials
* Since it is a website there is requirement of internet and a steady internet for test taking.

### Gantt Chart

