# CS 255 Business Requirements Document Template

**Michael Stoner**

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 for this project is DriverPass, and they want us to design and build a program that helps student drivers better prepare for the DMV written and driving tests. The system will be online and offer classes and practice tests to students who are working on getting their driving permit/license. They will also have the opportunity to schedule on-the-road training with an instructor if they wish.

### 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?*

* Liam, the owner of DriverPass saw that many people were failing their DMV driving test and wants to fix that problem by offering online classes and practice test that will teach the student the required knowledge to pass the driving test. Also, if the student wants on-the-road training with an instructor, they can schedule that. They believe that this driving training will fill the void in the market when it comes to new students that are struggling with learning the required skills to get their license.

### 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 program should have a welcome page that gives general information about the company and the issue they are here to fix.
* The first page should have a link to sign up as a new student. Or if already a student, a sign in form.
* The classes and tests will be online and accessible by computer or mobile device.
* Test results can be downloaded for offline viewing and some class information as well so the student can study even if they don’t have internet access.
* Liam wants administration privileges to reset all passwords and access to remove employees from the system who no longer work there.
* Customers can take online driving classes and take practice tests.
* Customers can schedule on-the-road training on the website or by phone.
* Liam wants to be able to track and make changes to the record in the system.
* Have a record of the instructor who is going with the student and what time the appointment is.
* Customer can schedule, modify, and cancel appointments online.
* Customers can pick one of three packages that are available for on-the-road training.
* The online form for registration will have the following required information, first name, last name, address, phone number, state, and credit card information.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The application will be web based.
* Hosting will be cloud based.
* The system should be updated regularly and scheduled during low use hours.
* The system should load quickly and only pass required information back and forth between client and server.

#### Platform Constraints

* Because the application is web-based, it needs to run on all major computer and mobile browsers.
* Chrome, Firefox, Safari, and maybe Internet Explorer need to be supported.
* The system’s backend does need a database to store user information.
* Each browser has developer tools built into it that can be used to develop and maintain the product.

#### Accuracy and Precision

* Each user will have a unique ID number assigned to it when a new user is created.
* All passwords will be case-sensitive and for security reasons we will not store passwords.
* All error codes and issues need to be reported to the admin when they occur so that they can be fixed.
* If a user tries to login three times with a wrong password, the password needs to be reset.

#### Adaptability

* The admin/owner will have the ability to update user information in the backend without having to make change to the code.
* Software updates will occur regularly.
* Changes to the application will need to be made by a developer.
* The IT admin needs access to the whole system, database and hosting web server.

#### Security

* For a user to login to the platform, they will need their email address and password.
* If a user tries to login three times with an incorrect password the account will be locked until the password has been reset.
* We will use two-factor authentication to add an additional layer of security and protection to the users and system.
* Passwords can be reset by email and will require the user to answer security questions as well as enter a security code that is sent by SMS.
* All user input needs to be verified before being used within the system.
* When interacting with the database, the backend will use prepared SQL statements to protect against SQL injection.

### Functional Requirements

* The system shall fulfill a void in the DMV student test market and help students pass the test.
* The system shall provide 24/7 access to online driving training.
* The system shall provide on the road training options.
* The system shall provide offline options for studying.
* The system shall require user validation for login.
* The system shall allow users to make online reservations for on the road training.
* The system shall allow users to cancel reservations.
* The system shall allow admin or owner to fix user information.
* The system shall track all reservations and have the student’s name instructor and what packaged they bought.
* The system shall allow IT to manage the system and modify it.
* The system shall list three on the road training packages.
* The system shall require a developer to make changes to the product.
* The system shall allow owner to remove former employees from the system login.
* The system shall save user information.
* The system shall run on the web and be cloud based.
* The system shall allow for new DMV updates.
* The system shall provide security to users and the product.
* The system shall provide a backup for the product.
* The system shall have user friendly interface.

### User Interface

* The interface needs to be user friendly.
* There are four different users, Owner, admin, employee, and student.
* The admin and owner need to be able to monitor the whole system.
* The employees need to be able to update and add new user information and reservations.
* Students need to be able to register, login, study for tests both online and offline, take test, see test scores, see on the road training packages, and make and cancel reservations.

### Assumptions

* Users have 24/7 access to the platform.
* The platform will help students to pass the written and road test.
* Users and instructors will show up for on the road training.
* Admin will know how to maintain the system and make updates.
* Security will protect the user information and platform.

### Limitations

* DriverPass only has ten cars.
* Cloud based security and backup.
* There are only three on the road driving packages available.
* Internet interruptions and server issues may cause the training to be unavailable.
* Technical support for users is limited.

### Gantt Chart

*A project schedule with pink boxes

Description automatically generated with medium confidence*