# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* The purpose of the project is to help DriverPass achieve their goal which overall is to help people train to be better drivers.
* DriverPass is the name of the company that is our client.
* They’d like for the system to be able to have DMV-based instruction, driving sessions, etc.

### System Background

* DriverPass would like for the system to be able to allow users to take online courses and practice their knowledge via test.
* DriverPass has a solution for people to overcome their bad driving habits by helping them gain a better understanding of how to drive via their classes and practice.
* The different components that are needed for such a system would be the following:
  + Online, Web and Cloud Based: The system should be fully online with a website or web application that is hosted via the cloud for easier scalability with their user base.
  + Security: The system should have user authentication and role-based permissions to limit the breach of confidential information and outside course manipulation.
  + Tracking: The system should require that everything have a history of the actions taken meaning that a course has an edit history, a package purchase has a transaction history, a driving lesson has a history of what happened during the lesson and each of these provide in depth informative detail of who did what and when.
  + Reservations: The system should allow for the user, instructor, or DriverPass’ secretary to create and edit driving practice lessons.

### Objectives and Goals

The following are objectives which the system should be able to do when it is completed.

* Online & offline access through downloading information
* Security based upon different rights and roles
* Tracking based upon making a reservation or cancelling one along with modification of one
* Make reservations for lessons and setup of a reservation either by the customer or through DriverPass' secretary
* Identification of which driver is paired with which customer
* Customer ability to choose between three different lesson packages
* Disable purchasing of specific packages at owner discretion
* Registration either by the customer or secretary with sensitive user data along with pickup/drop-off location
* Customer access to schedule appointments
* Notification based around DMV rules and policy changes
* Utilize cloud-based web hosting
* Maintenance outsourced or handled by us so the client can focus on the business or setup in a way that there is minimal technical difficulties
* Test progress showing: In Progress, completed classes, along with name, time taken, score, and status consisting of: not taken, in progress, failed or passed along with notes from the driver
* Input form for sensitive user data filled by the customer or secretary
* Contact Information

The following are goals to which the system can utilize measurable tasks which are needed to achieve the previous objectives.

* Collect Requirements
* Create Use Case Diagrams
* Build Activity Diagrams for Each Use Case
* Research User Interface Designs
* Build Class Diagram
* Get Customer Approval
* Build Interface
* Link DB to Interface
* Build Business Logic
* Test System
* Deliver System
* Sign-off Meeting

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* Based upon a better and more convenient user experience the system should have fast response times.
* The overall performance shouldn’t degrade with having a large user base concurrently using the system.
* Critical portion response times shouldn’t not be allowed past a specific threshold.

#### Platform Constraints

* The system should comply and be compatible with the current ecosystem the client is currently using.
* There should however be support for multiple platforms including desktop and mobile access.

#### Accuracy and Precision

* The system must keep strong levels of data accuracy and precision.
* Results of calculations and reporting should have the utmost accuracy.

#### Adaptability

* The system should be flexible and allow for scalability and be easily customized to allow for future changes.
* Support with third-party applications or other systems should be easily integrated when necessary.

#### Security

* The system should keep up to date procedures related to security to enforce the protection of sensitive data from outside access and modification.
* Authentication with users and any other authentication methods should be in place where applicable to ensure correct access.
* Encryption should be utilized to maintain confidentiality of information through transmission or otherwise stored.

### Functional Requirements

* The system shall allow for user registration through the creation of accounts by users with unique credentials and the process should only collect the necessary information and enforce data validation.
* The system shall allow users that have registered to gain secure access into the system using their unique credentials while performing authentication and validation will be used to verify the identity and authorization.
* The system shall provide a dashboard that is personalized per user which is shown right away once the user logs in and should display the relevant information.
* The system shall offer incredibly analytics and precise reporting. The users should be able to generate reports that are either predefined or custom based upon their goals/requirements. While the analytical feature should provide unique insight and data visualizations of their progress to allow for smart, well-informed decisions.
* The system shall provide end users intercommunication and collaboration through messaging, document sharing and task assignments to facilitate and enforce teamwork.
* The system shall allow for easy integration of either internal or external systems based upon new requirements.
* The system shall provide resources and documentation for users to refer to and understand how to utilize the system. It shall also provide support channels that are easily accessible through online chat or email when users need assistance.

### User Interface

* The system should have an easy to use and intuitive interface for easy navigation.
* There should be a display for the user’s current progress of classes along with completed and ongoing tests with all the relevant details including their name, time taken, score, and current status.
* There should be an easy way for users to schedule, modify, or cancel a reservation online.
* Users should be able to contact DriverPass within the system and receive instant feedback responses.

### Assumptions

* Users have basic computer literacy skills.
* Users have internet access.
* Users provide accurate information for reservations and account registration.
* The system will utilize cloud-based technology to ensure scalability with the user base to allow for increased reliability and easy backups of important data.

### Limitations

* There will not be included modules for non-developers to easily remove or add features.
* Future feature additions will be subject to extensive logical means and be considered in iterated releases and won’t be included within the alpha system design.

### Gantt Chart

*A graph of a project

Description automatically generated with medium confidence*