# CS 255 Business Requirements

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## System Components and Design

### Purpose

Our client, DriverPass wants to provide a greater driver training for students. The main goal is to have more students proficiently pass their driving exams while providing more efficient studying tools and resources. The client wants to establish a system that provides online classes and incorporate practice test. This system will allow the users to access their data at any time-anywhere.

### System Background

Many student drivers are failing their first initial driving test. The client wants to develop a system to better prepare student drivers for a successful pass. The system will include practice tests, study resources, classes, and the option to book in-person training. The application requires security features for accessibility for users. Also, the system application will track, modify, and offer multiple on-road training options for students.

### Objectives and Goals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Develop reliable system application. | Create a user-friendly platform. | Establish security features to meet clients needs. | Help create options for practice test and study resources. | Include reservation options for in-person training for students. |
| Accessible online and offline. | Create tracking logs. | Create different package options for in-person training. | Create registration – and store students’ information. | Create scheduling portion for students. |

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

The system application would be web-based while utilizing cloud. Using a cloud will provide faster server uptime and increase the systems performance. The system should be updated at any point the client requires to add or develop new features. Maintenance for the system will be performed weekly-this includes performing upgrades and security checks.

#### Platform Constraints

The system application will run on both windows and Unix. Because we are utilizing a cloud-based system- we can manage all security and collaborate more efficiently.

#### Accuracy and Precision

We will have two types of users. Standard users and Administrator users. Standard users will be able to create a username and password when entering the site. The input will be case sensitive. The system will have a multi-authentication to prevent hacking. With any immediate problems such as hacking, glitches, or faults within the system the Administrators will be immediately informed.

#### Adaptability

Only Administrators will have to ability to access certain data. This will include add/remove/modify rights for standard users. Administrators will be designated to have unique usernames and passwords for authentication to perform these actions.

#### Security

Multi-factor authentication is required for login. This will be a username and password. The second form authentication will be a code sent to your email or mobile device for verification. Our cloud will hold the responsibility for data exchange between server and clients. With any brute forces attacks, our system will be designed after 3 failed sign-in attempts the account will be locked until personal verification is established. The personal verification is for both standard users and administrative users.

### Functional Requirements

* This system shall validate standard user’s credentials when logging in.
* This system shall validate administrative user’s credentials when logging in.
* This system shall book reservations made by standard users.
* This system shall run efficiently with provided security.
* This system shall offer practical test for student drivers.
* This system shall provide booking options for in-person training
* This system shall provide different driving packaging options.

### User Interface

* The interface will allow student drivers to make in-person reservations, provide study resources, online classes, and practice tests. Standard users and administrative users will be the two types of users. The admin will be able to add/remove/modify information as needed. Different interfaces such as computer, mobile or any device with internet connection are able to interact with the application.

### Assumptions

The assumption would be – an unlimited budget with unlimited resources to reach our projects goal. No budget was established during the interview.

### Limitations

The limitations of this project would be the team was not given a budget. I believe we will need to hire more team members to increase productivity and reach the time frame the client is reaching for. We could use the agile approach for the development of this system.

### Gantt Chart

*Timeline

Description automatically generated*