# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* As seen in the interview transcript, our client, DriverPass, wants to train students for their driver’s test through online practice tests, in person and online courses, and on-the-road training.
* Our goal is to provide DriverPass with a program that can intake a student’s information and allow students to schedule driving lessons and in person classes.
* The program should also be cloud-based and allow students to change their passwords and view progress and instructor comments.

### System Background

* In the interview transcript, DriverPass indicated they want the system to interact with students to take online classes, practice tests, and to set up driving lesson sessions as well as in person classes.
* DriverPass sees that students are under prepared to take and pass their driver’s test. Therefore, they are going to offer services mentioned above to better prepare them.
* As outlined in the interview transcript, DriverPass wants students to be able to modify their own information and modify driving lessons as well as resetting forgotten passwords.
* DriverPass needs to be able to access students’ information for reservation statuses, progress through courses, and modification / maintenance.
* Students need to be able to choose which of the 3 training packages they would like to have.
* Training packages outlined in the interview transcript:

1. 3 in car training sessions (6 hours total)
2. 4 in car training sessions (8 hours total) + in-person lesson to cover DMV rules
3. 6 in car training sessions (12 hours total) + in-person lesson to cover DMV rules + online class with practice tests

* DriverPass needs to be able to disable a package if needed.

### Objectives and Goals

* The DriverPass system needs to be cloud-based
* DriverPass IT needs access to all accounts for maintenance
* The system needs to track reservations (new reservations, modified reservations, cancelled reservations, etc.)
* DriverPass needs to print reservation and user activity reports as well as disable a package if needed
* DriverPass will get student information over the phone and enter information into system
* System needs to be connected to DMV database to ensure course material is kept up to date
* Display a grid (example in interview transcript) to the student of their lesson time, start hour, end hour, and driver comments
* Display student’s progress with the test name, time taken, score, and status. Available statuses: not taken, in progress, failed, or passed
* Display contact page for student to contact DriverPass
* Display notifications to student if DriverPass needs to contact them

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* As mentioned in the interview transcript, DriverPass wants the system to be web-based and stored in the cloud.
* The system needs to run fast in order to update DriverPass and clients as soon as an update is made to their profile / account. The information should take less than 5 seconds to update.
* The system needs to be updated frequently. When information is added or removed from a client profile as well as when new learning materials are uploaded by DriverPass.
* The system needs to check daily with the DMV database to ensure that learning materials are up to date.

#### Platform Constraints

* The finished software must be compatible with Windows, Linux, and MacOS.
* The finished software must also be compatible with Android OS and Mac iOS for mobile users.
* The software will be connected to a cloud database with appointment information as well as user profiles and privileges.

#### Accuracy and Precision

* When a new user profile is created by the DriverPass secretary, it will be sorted into client, employee, or admin.
* The only case-sensitive input will be for passwords.
* Error messages or system problems should be reported to administrators less than 5 seconds after they occur.

#### Adaptability

* As mentioned in the interview transcript, DriverPass IT administrators need access to all accounts to perform maintenance as well as block and restrict accounts.
* Each user will be a new class object and therefore will be able to be added, modified, or removed without changing the program’s code.
* Platform updates will not require the entire code to be rebuild. Platform updates should take less than 2 days to adapt code for.

#### Security

* When a user logs in they will prompted to enter their email address and password.
* If a user forgets their password, they can enter their email and be sent instructions to reset the password themselves.
* If there were a hacking attempt on an account, it would be temporarily locked. Administrators will be notified less than 5 seconds after the account is locked. Administrators can contact the account user and reset passwords or create a new account for the user.

### Functional Requirements

* The system shall keep a record of changes made to reservations including who made the change to the reservation and when the change occurred.
* The system shall record which driver and car is booked for a reservation.
* The system shall receive updates from the DMV website, clients, and DriverPass so that all information is up to date.

### User Interface

* Taken from the interface mockup in the interview transcript, clients will be able to view:
  + Online test progress
  + Their personal information (name, phone number, email, physical address, etc.)
  + Driver notes
  + Driver photo
  + Special needs / notes
* Driver notes should display a table with lesson time, starting hour, ending hour, and driver comments (example in interview transcript)
* Clients and DriverPass will be able to contact each other through the interface
* The interface will be in a web browser

### Assumptions

* We are assuming that users have access to a computer or mobile device with an internet browser and access to the internet.
* We are assuming that the DMV database will be able to be accessed and update our system with new learning material automatically.

### Limitations

* Clients will not be able to access the system when they are offline.
* The project will be completed in 15 weeks.
* The system will not be available as a mobile app.
* In person classes and driving lessons will only be available to local clients.

### Gantt Chart

*Chart, timeline

Description automatically generated*

**References**

Liam, Ian, Jennifer, Sam. (January 22, 2022). *CS 255 DriverPass Interview Transcript.*