# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

* DriverPass wants to teach students to pass DMV tests
* Take advantage of a void in the market
* Provide online classes to train drivers
* Provide driving classes with a trainer
* Work with DMV for updates in rules and laws

### System Background

* DriverPass want to improve student success in obtaining a driver’s license
* DriverPass will provide online classes to train drivers
* Provide in-person driving classes in a car with a trainer
* User takes online classes and practice tests
* Employees, users, and owner can create account, pay and schedule lessons and modify schedule
* IT Employee needs access to maintain system
* Owner needs access to all files, reports, and passwords
* Website needs to show
  + Driver ID/photo
  + Driver notes
  + Student ID/photo
  + Basic student info
  + Special needs, if any

### Objectives and Goals

* Provide a system to create, modify, and delete accounts
* Create student profile
  + Name
  + Address
  + Phone
  + Email
  + Birthday
  + Credit card information
  + Special needs
  + Username
* Create driver profile
  + Schedule (past and upcoming)
  + Record of training in new DMV rules
* Create vehicle profile
  + Schedule of use (past and upcoming)
  + Maintenance record
* Assign trainers to students
* Assign cars to trainers
* Schedule trainers and students
  + Date and time
  + Online sign-up
  + By phone call
  + In person with trainer
* Updates schedule and accounts in real time
* Run on the cloud
* Send automatic reminders

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* It will be a cross-platform system which will work in several mobile and web-based OS.
* Each page will load within 2 seconds.
* The system will have real-time collaboration within the calendar or scheduling function.
* The whole system will update nightly.
* The text hyper-link with the DMV will be confirmed nightly within the update.

#### Platform Constraints

* A database to collect and store information is necessary to hold student information, schedules, and progress along with administration and employee data. A record of all events and attempts will be maintained by date and user id in the database.
* The system will run on Windows, iOS, and the web.

#### Accuracy and Precision

* Each user will have a unique case-sensitive username and password to gain access to the database.
  + Used case-sensitive usernames will generate a ‘used – not available’ response.
* The system will report details of all access events made by users. Report created in real-time.
* Failed sign-ins will lock the account and require contact with the administrator.

#### Adaptability

* Users will have access to add, remove, and modify data without changing code.
* IT and owner will have additional access to modify code, monitor, and print reports.
* Platform updates will be scheduled to follow the nightly updates as necessary.

#### Security

* Secure login
  + Unique case-sensitive username and password.
  + Two-step authentication for sign in
* Password reset with email or text confirmation after 3 attempts.
* Use CAPTCHAs
* Require updated passwords quarterly
* Use an TLS certificate

### Functional Requirements

* The system shall be available on mobile and desktop or laptop devices.
* The system shall create secure accounts with two-step authentication sign in.
* The system shall validate user credentials when logging in.
* The system shall allow access to schedule driving classes when drivers are available.
* The system shall provide practice tests with study materials.
* The system shall allow customer user to access schedule and study/test materials.
* The system shall report up-to-date progress of class and hours logged.
* The system shall display grades.
* The system shall record all interactions by username and date.
* The system shall allow trainer to input notes and share feedback into related customer account.
* The system shall allow IT administrator to access all accounts to add, delete, and modify data as is necessary to maintain the system.
* The system shall create a financial ledger with access to bank account accessible by the owner.

### User Interface

* The devices will vary based on user.
  + Web based user will most likely use keyboard, although there could be touch screen.
  + Android and iOS will use touch screen, although some tablets may be accessed by keyboard.
* All devices will access to add, delete, and modify the system data base by secure sign in to display:
  + Personal information (name, photo, phone number, address, etc.)
  + Past and present schedule
  + Progress in on-line tests, study material and trainer notes.
  + Special needs (if any)
  + Secure payment
* IT administration will have access to all customer and trainer data except financial record.
  + Update specifics of the service
  + Trainer picture and introduction
* Owner will have access to all the system.

### Assumptions

* We assume customers have and can use internet technology.
* We assume customers will want to drive and study online with practice tests.
* I assume this document is part of the finalization of a financial agreement to fund this proposal. (And the details are unnecessary/unknown to me as a student – otherwise Assumptions and Limitations would both note a financial unknown.)

### Limitations

* Ensuring the mobile and the web-based display of the system is accounting for the difference in screen size. The configuration may need to be different.
* Time and budget allow for limited problems in programming, but an unexpected snag could create a problem with both time and budget.

### Gantt Chart

Diagram

Description automatically generated

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