# CS 255 Business Requirements Document Template

Jessica Megaro

## System Components and Design

### Purpose

* Liam, owner of DriverPass, wants to build a product to allow people learning to drive to access online driving courses, study materials, and schedule for on the road driving time through packages offered.

### System Background

* This solution allows new drivers to study and pass their driving tests and potentially lower the failure rate.
* Solves the lack of training resources
* System must be able to block former employee access
* Allow admin to reset passwords for customers
* Track all scheduling and modifications and be able to report on these metrics
* Allow customers to access materials to study online, take online courses and schedule themselves for a package that includes any set number of driver times and pick up location as described by the packages offered at the time.
* Cloud based.

### Objectives and Goals

* The system should be able to allow customers to schedule, modify and cancel their own appointments.
* The system should be able to track all activity to print reports when needed.
* The system should provide online study materials as well as online courses for customers to follow.
* The admin should be able to access all information on and offline as requested.
* Must allow flexibility to add and remove packages as needed in future, and the ability to disable a package now if it cannot be provided.
* The system must be able to connect with the DMV to receive updates on requirements and any changes that occur to the testing process.
* Contact information present on advertising so a person can call in and give their information to get registered.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* Web based system to run on most or all devices and machines through most or all browsers across all platforms.
* Connected to DMV to allow DriverPass to receive important updates and to update system immediately with vital information regarding any changes in driving rules or traffic rules, or processes to get and maintain a driver’s license.
* When being accessed online, response time should be the standard of 200 milliseconds to 1 second, and never more than 2 seconds when being used on a reliable network.

#### Platform Constraints

* The system should run on any platform that can support an internet browser.
* Databases are necessary to provide learning material and resources as well as hold the base of consumer profiles and appointment logs.

#### Accuracy and Precision

* Users will be sorted by a unique username and password that is case sensitive and unique.
* The verification system should alert and not allow for duplicate usernames.
* Each user is assigned as a consumer ID number for reporting purposes.
* Users will then be required to verify their email address.
* Users can reset their password if needed through email link after verification takes place.
* Admin should be alerted if same username and password is logged into multiple devices or locations.

#### Adaptability

* Admin will need full and total access to the system as he will be the one doing the maintenance and updates to the system.
* Platform update issues should alert IT, however, having the updates install should be error free.
* Admin should not need to touch the source code to perform duties.
* Adding, modifying, and removing users is a feature that is built in to be used by the admin.

#### Security

* Unique username and case sensitive password are required for log in,
* Use TLS to secure communication.
* IT should be alerted immediately if there is a brute force hacking attempt, followed by a lock out of the user until issue is resolved.
* User can reset their own password with email verification.

### Functional Requirements

* The system shall validate user credentials upon log in
  + Username
  + Password
  + Email verification
* The system shall provide the ability to purchase a driving package.
  + Buy package
  + Change package
  + Cancel package
* The system shall alert IT of any issue updating or if a user has been duplicated.
* The system shall determine whether a user is a consumer or admin.
* The system shall process payment and provide confirmation.
  + Take payment information
  + Process payment
  + Provide confirmation
* The system shall allow for appointments
  + Make
  + Change
  + Cancel
* The system shall pair drivers with consumers and provide confirmation as well as a reminder of their in-person road instruction.
* The system shall lock out any user after a brute force attempt until issue is resolved.

### User Interface

* The interface needs to be easily read and navigated.
* The admin must be able to:
  + Add or remove employees
  + Reset passwords
  + Update and maintain application
  + Operate on and offline
  + Generate metrics as needed
* The consumer must be able to:
  + Enter log in information to enter site
  + Access library materials and resources
  + Purchase a package
  + Enter payment information
  + Make, change, or cancel an appointment
  + Obtain IT support
  + Use materials on or offline
  + Reset password
  + Practice test taking and physical road driving

### Assumptions

* It is assumed all users have internet access and the knowledge to access web-based applications with ease.
* It is assumed that the system will always be available.
* It is assumed that the number of consumers will not exceed the capabilities of the cloud or webserver service provided.
* It is assumed that the consumer can operate a phone and/or computer to make or change appointments.
* No process exists for the assigned driving instructors to contact the consumers for confirmation or information on when and how to meet up to practice their driving.
* It is assumed all consumers know how to read and write.

### Limitations

* Even though materials can be accessed on or offline, updates in materials require internet access.
* Internet access is required to use web-based application.
* Only one admin exists currently. Should that person be unavailable, no back up person has been assigned duties to maintain or update system.
* Above mentioned issue also leaves no one to reset passwords or add or remove employees should the current person be unavailable.
* The learning materials are limited to what the DMV and any other reliable and accurate databases can provide.

### Gantt Chart

Chart

Description automatically generated