CS 255 Business Requirements Document

Kendrick Trivette Free

[Kendrick.free@snhu.edu](mailto:Kendrick.free@snhu.edu)

Southern New Hampshire University

## System Components and Design

### Purpose

* DriverPass is an online based driving school that is owned by Liam and maintained by DriverPass IT officer Ian
* DriverPass shall provide online educational content as well as scheduled road test

### System Background

* DriverPass shall provide online classes
* DriverPass shall provide road test scheduling
* DriverPass shall provide a functioning user interface
* DriverPass shall allow changes to be made to appointments as well as track any changes made
* DriverPass shall provide three preset packages:

1. Six hours in a car with a trainer
2. Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies
3. Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests

* DriverPass shall provide IT officer as well as owner Liam admin privilege as well as the ability to provide/revoke access to company employees.
* DriverPass shall be cloud based
* Driverpass shall communicate with the DMV (Department of Motor Vehicles) regarding new rules and regulations
* DriverPass shall allow Liam as well as IT officer to add/remove packages
* DriverPass shall register new clients via cellphone

### Objectives and Goals

System Objectives:

* Provide customers access to online classes and test
* Schedule appointments
* Provide clean user interface for customer to access website
* Provide class sessions as well as a gradebook to refer to
* Provide online gradebook management for fast results
* Account for special needs that are unique to each user

System Goals will be achieved if the following measurable task are completed:

* Build case and activity diagrams (8 business days)
* Design user interface (9 business days, no dependency)
* Design class diagrams (9 business days)
* Build database tables (9 business days)
* Assuming user does approve work, interface can be completed (12 business days)
* Business logic (Security, role, right) (22 business days)

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* DriverPass shall be accessible via computer and cellphone
* DriverPass shall be web-based
* DriverPass system shall update whenever changes are made (updates, work submission, security breaches

#### Platform Constraints

* DriverPass shall operate on Windows, macOS and Linux.
* DriverPass shall require a database to store large amounts of information. Microsoft SQL server is an appropriate database.
* DriverPass is web based and can be accessed across multiple platforms

#### Accuracy and Precision

* All account details are case sensitive to distinguish account differences
* No redundant names or passwords

#### Adaptability

* Users can change account details via website
* IT admin can change any users account details
* System will update in accordance with the platforms it operates on to ensure compatibility
* IT admin will need full access to the system to be able to make any changes needed to ensure the system run correctly

#### Security

* User log in requires a unique username and password
* Use SSL security language to secure connection between client and server
* Backup information so that in the event of a Brute hack data can be wiped and recovered from backup
* Account security questions to accommodate forgotten passwords
* Password Updates in response to numerous failed password attempts

### Functional Requirements

* The system shall require unique username and password to log in
* The system shall validate user credentials when input
* The system shall secure connection between user and server
* The system shall update grades as proctor grades them
* The system shall allow road test scheduling
* The system shall allow users to download and upload documents to server
* The system shall provide access to online learning material
* The system shall provide full system access to owner Liam and IT officer Ian
* The system shall provide preset packages regarding road test
* The system shall regularly back-up information

### User Interface

User interface will provide following windows of information:

* DriverPass Logo
* Online test progress window
* Driver notes window
* Information window (first name, last name, address, city, state, zip, phone, email, etc)
* Special needs window
* Driver Photo window
* Student photo window

User interface needs:

* Log in window

Users will be able to:

* Access classes
* Access grades
* Access class/road test schedule
* Change/alter schedule

Users will be able to interact with the interface via browser to ensure compatibility on computers and cell phones.

### Assumptions

* Company budget
* Technology education (Does the company know how to use associated software and programs?)

### Limitations

* Company budget
* Technology education (Does the company know how to use associated software and programs?)

### Gantt Chart

Chart, waterfall chart

Description automatically generated