

## CS 255 Business Requirements Document Template

### System Components and Design

#### Purpose

The purpose of this project is to fill the void that the client, DriverPass, perceives in the market when it comes to quality driver training by creating a system that provides access to online classes, practice tests, and on-the-road training.

- DriverPass wants their system to provide students with online classes and practice tests through a learning management system
- The system should also provide students with the opportunity to receive on-the-road training

#### System Background

DriverPass wants to fix the problem of over 65% of students applying for the driving license exam failing due to only studying previous tests. The system should provide a learning management system to give students access to online classes and practice tests. It must also provide students with the ability to make reservations for driving training and these lessons should be kept track of, including the student, driver, and car.

- System must provide online classes, practice tests, and on-the-road training to help better prepare customers for their driving tests
- Driving appointments should offer three packages to choose from
  - Package 1: Six hours in car with trainer
  - Package 2: Eight hours in car with trainer and an in-person lesson on DMV rules and policies
  - Package 3: Twelve hours in car with trainer, in-person lesson on DMV rules and policies, and access to online class material and practice tests
- Owner of DriverPass should be able to access data online from any computer or mobile device and to download the reports and information to work on from home
- Owner needs to have full access over all accounts
  - IT officer should have the ability to maintain and modify the system
  - Secretary should be able to answer calls from customers make appointments
  - Students should be able to make, modify, and cancel driving lesson reservations
- System should keep track of who made a reservation, who canceled it, and who modified it last
  - Must be able to print activity report
- System should run off the web, preferably the cloud so that the client does not have to deal with backup and security and can focus on running the business with minimal technical problems

#### Objectives and Goals

When this system is complete, it should be a fully functional website hosted on the cloud. It should include a functional learning management system that includes online classes and practice tests. This LMS will update automatically to changes in DMV rules and policies or when modified by the client. The system will deliver an interface laid out according to the owner's sketch. Customers will be able to

schedule driving appointments, choosing one of three packages, and the system should receive and store all relevant information.

- Owner should have full access over all accounts, allowing him to reset passwords and block another user's access
- System must be able to print an activity report that will show who is responsible when something goes wrong or when an appointment is modified
- System must be able to track which user is matched up with a certain driver, time, and car
- IT officer must be able to maintain and modify the system
- System must provide users with three packages to choose from, which must be able to be disabled by the DriverPass owner so as to keep the system flexible
- When a client calls to register for a lesson, the system should receive and store all of the information including:
  - name, address, phone number, and state
  - credit card number, expiration date, and security code
  - pick-up and drop-off location
- Customer must be able to reset their password if they forget it
- System must be connected to the DMV in a way so as to provide the client with a notification any time the DMV makes a change to their rules or policies
- There should be an input form where the student or secretary is able to fill in student information such as name, address, and contact info
- There should be a page that allows users to contact DriverPass, as well as a way for the client to contact the students

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

- The system should be web-based and function on the cloud while being able to run with the speed expected of a modern website
- System should be able to be updated by the IT officer whenever the client sees fit
- System should automatically receive updates from the DMV on rule changes and updated content and practice questions

#### Platform Constraints

- The system should be able to function on all major operating systems, including mobile
- System must be connected to DMV database in order to keep up to date with new rules, policies, and practice questions
  - Client should receive a notification whenever they receive an update

#### Accuracy and Precision

- The system will distinguish between different users via their case-sensitive username and password, which they will be able to set when creating their account
- System should alert the admin immediately if there are any problems so that they can get them fixed as soon as possible or disable the affected package

## **Adaptability**

- The owner should have full control over the users on the system, including the ability to change forgotten passwords, and add, modify, or remove users as the company's personnel changes
- The IT officer should be provided a level of access that allows them to maintain or modify the system
- The system should automatically receive updates from the DMV
- The system will adapt with platform updates whenever the client feels the need to introduce new features in the future

## **Security**

- In order to login, users must use their case-sensitive username and password
- Customers should be able to reset their password if they forget it
- The system should temporarily block user access after three failed login attempts in order to prevent "brute force" hacking attempts
- The connection between the client and the server will be secured by the cloud's built in functionality

## **Functional Requirements**

- The system shall have pages dedicated to learning modules, practice tests, appointment scheduling, client-customer contact, registration, and a home page
- The system shall coordinate materials and assessments using online learning modality
- The system shall validate username and password upon login
  - Access will be temporarily blocked after three failed login attempts
- The system shall receive and store all relevant student information including:
  - Name and address
  - Contact information
  - Payment information
  - Course progress and grades
- The system shall track all appointment information including:
  - Student information, with the addition of a pick-up and drop-off point
  - Driver and car assigned to appointment
  - Package chosen
  - When an appointment is made, canceled, or modified, and who is responsible
    - Must be able to print activity report
- The system shall allow students to register themselves and reset their password if they forget it
- The system shall allow the owner to disable packages that they do not want customers to sign up for

- The system shall automatically receive updates from the DMV on new rules and policies and alert the client when an update is received

#### **User Interface**

- User interface should be laid out according to sketch provided by DriverPass owner
- Interface should display online test progress, including what has been completed, when it was taken, and the grade received
- The system will have separate pages dedicated to inputting student information and contacting the business or vice versa
- The interface should be adapted to look and function properly on both browser and mobile
- The different users for the interface will be the IT officer, the owner, the secretary, and the students

#### **Assumptions**

- The user has access to an internet-connected device
- The user is qualified to be a driving student
- We are able to coordinate with local DMVs in order to access their rules, content, and sample questions, as well as receive updates on any changes

#### **Limitations**

- Five month time window for development
- Unspecified budget
- Should not be any technological limitations as we have the ability to create a web-based system hosted by the cloud

#### **Gantt Chart**

