# Latoria Judkins

# CS 255 Business Requirements Document Template

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* The purpose of this project is to fulfill the vision of the owner of DriverPass by creating a new system to train students for the driving test at their local department of motor vehicles (DMV). DriverPass would like customers to be able to take classes online and practice tests, also including scheduling on-the-road training.

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* DriverPass saw a void in the market when it comes to training students for the driving test at their local DMV due to so many people failing their driving tests. The system needs to be to provide online training and practice tests for driving, schedule driving lessons, track user activity, allowed access to data anywhere online and offline, cloud-based, manage packages for different driving lessons, online appointment scheduling, stay up to date with DMV regulations, and password reset capability.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* When completed the system should be able to access from anywhere online or offline, view driver notes/comments, track what driver is matched with the customer with pick-up and drop-off location, allow customers to choose packages, take online tests and track progress with completed or non-completed tasks. The tasks that need to be included in the system design to achieve this is by staying up to date with DMV regulations, schedules, user data, security software, and program software updates.

## Requirements

### Nonfunctional Requirements

#### 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?*

* The environments that this system will need to run-in would-be web based.
* The system will need to connect to DMV so that any updates to their rules, policies, or sample questions will be offered immediately.
* Since the system is web based the connectivity should be fast and reliable to support the current and future users without interruptions or delay.

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* The platform should support computer and mobile access anywhere that has internet access.
* DriverPass will need to be compatible with different web browsers.
* The back end will require a third-party source to manage and store data on the database.

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* The different users will be distinguished by their usernames and password.
* The username and password should have input case sensitivity.
* The system will let the user know when log in credentials have been entered incorrectly by displaying an error message “username or password incorrect.”
* If a user enters log in information incorrectly a certain number of times the admin will automatically lock the account and require the user to reset password.

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Admins can add/remove/modify package availability.
* The system will adapt to platform changes by notifying the user when an update is available.
* IT Admin will need to have access to full access to system to prevent data breaches and to be able to modify any system changes.

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* The user is required to enter username and password to log in.
* To secure the connection or data exchange between the client and server is offer system updates to keep security software up to date. Also offer the user to set up two factor authentication.
* If there is a “brute force” hacking attempt the user will be notified and then that the account has been locked out and in certain instances the IP address may be blocked.
* If a user forgets their password the system will prompt user, the password is incorrect and send password reset link through email address customer has linked to their account profile.

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall validate user credentials when logging in.
* The system shall offer practice tests, classes, and reservation availability.
* The system shall offer three driving packages.
* The system shall run with no errors or downtime.
* The system shall notify the user when an update is available.
* The system shall send the customer a receipt after purchasing a package.
* The system shall notify the driver when a customer has requested to book with them.

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The interface needs to be user friendly.
* The different users for this interface will be customers and admin.
* The customer will be able to create a profile, schedule reservations, take online practice tests, request a driver, and view driver notes or testing progress. The admin will be able to make changes to the program and prevent data breaches.

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* The user has basic knowledge of using a computer.
* The user has a device compatible with DriverPass.
* The user has a reliable internet connection.

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* The system will not function without power or internet access.

### Gantt Chart

A colorful rectangular grid with different colored squares

Description automatically generated with medium confidence