# 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 client wants those interested in preparing for their driving test able to create and pay for a learning package
* Want their system to be accessible from anywhere with internet.
* Users should be able to make, schedule, or cancel reservations.
* Security level access for different users (boss, IT, secretary, general user)
* System should keep track of all modifications and when they happened.
* Should have 3 (current) packages for users to choose from that can be disabled or modified by admin or IT
* Accounts should be able to be reset when needed by user by the admin or IT
* System should notify when new compliance information from the DMV is received

### 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 wants to provide a widely accessible source of material and scheduling system for practicing for the driving test.
* They want users to be able to schedule appointments to have on the road training.
* DriverPass wants to have material study and practice tests for users to use.
* DriverPass is wanting a system that will be able to handle the ever-increasing user count they project and provide different packages depending on their needs.

### 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?*

* The system must be able to hold a scheduling list containing all dates scheduled by users for appointments. This should have their information and the driver’s
* A user should be able to schedule an appointment, then cancel or reschedule that appointment for a later date.
* IT user should be able to modify the system and packages.
* Admin should have all access.
* Data list should be kept containing appointment information for user and driver, this list should be returnable to admin or IT for record keeping.

## 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?*

* The system should run on a web-based cloud platform.
* System should run at the speed of the user’s internet speed.
* System should update when notifications about DMV information updates come in.

#### 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?*

* System should run on all internet browser supporting platforms (windows, linux, macOS, IOS)
* System will be on a cloud platform; however, a database of user information and logins will be needed.

#### 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 system will distinguish Administrator from case-sensitive username and password.
* The system will distinguish Technician and Secretary users from similar case-sensitive usernames and passwords.
* New users (customers) will create their own case-sensitive usernames and passwords.
* Administrator and Technician should receive alerts when any user needs to or already has reset their 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?*

* Administrator should have full access to all accounts. This includes resetting passwords and blocking all access.
* Technician should be about to modify the system, maintain functions, etc.
* System should receive and implement updates from the cloud service used.

#### 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?*

* ALL users require a case-sensitive username and password to access their individual accounts.
* If attempts to login exceed 3 times, then the account should be locked for 30 minutes. If the next attempt after that is failed, then account password should be force reset and technician and admin should be notified.
* If a user forgets their password an option should be provided to allow them to reset their password, should they have access to the email that created the account.
* Data should only be received or modified when a verified login has been provided.

### 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 verify user credentials when logging in to the system.
* The system shall present users with a selection of package choices to purchase
* The system shall keep records of customer appointment times and driver information
* The system shall present learning material and practice tests to users with the supporting package.
* The system shall keep records of progress made in the learning material.
* The system shall present user information and company contact information for quick access.

### 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.)?*

* User interface consists of a home screen with 6 or 7 information tables that display user information, test progress, special needs, driver notes, driver photo, and student photo.
* Driver notes should consist of lesson time, start time, end time, and driver comments.
* There should be a page that provides an information form for the user to fill out.
* There will also be a page where users can look at the available calendar and make an appointment.
* All users interact with the interface through a web browser of their choosing.

### 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?*

* User has access to stable internet or cell service.
* User has a mobile device or computer
* User has electricity

### 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?*

* System will fail if internet is lost on user’s end
* System will fail if power is lost on user’s end
* System will be useless if there are no drivers or cars for appointments.

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

Chart, timeline

Description automatically generated