# 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, DriverPass, is a company focused on creating a system that better trains people who are preparing for their DMV driving test
* To allow users to take online courses and practice tests
* To allow users to make or change their appointments online or by phone with driving instructors at DriverPass

### 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 fill a currently unmet societal need for more adequate training for drivers
* They want their system to meet this need by allowing their users to receive online training courses at the DriverPass website as well as in-person driving training with a DriverPass Driver
* The system should be secure and should protect users’ private information
* The system should be flexible, allowing for future expansion as the client’s needs evolve

### 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?*

* Allow offline access to the system to be used by the owner
* Give phone receptionists the ability to create and manage appointments at DriverPass
* Assign different roles each with varying levels of access to the system
* Allow users to choose from three different training packages
* Accept payment via cash or card
* Allow users to track their learning progress on the DriverPass website
* Allow users to create an account on the DriverPass website using their personal information
* Allow Drivers to make notes on a user’s account

## 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 shall run in a web-based environment
* The system shall be updated on a schedule that aligns with the DMV’s testing updates

#### 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 system shall run on all major platforms including Windows, Apple OS, and Unix
* The system shall utilize a database for it’s backend operation
* The system shall employ a local or cloud-based server

#### 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 shall inform the admin when there is an update to the DMV’s testing standards
* Each user shall have a unique combination of username and password
* Usernames and passwords shall be case sensitive

#### 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?*

* The system shall accomdiate the addition, deletion, and modification of users
* The system shall accommodate the activation and dactivation of individual customer Packages
* The system shall handle platform updates without interruption of the system

#### 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 system shall accommodate the resetting of passwords in the event of a lost password
* Data encryption shall be employed to protect the connections and data exchanges between the server and the client

### 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 differentiate between types of users
* The system shall create new reservations
* The system shall manage existing reservations
* The system shall track student progress
* The system shall update customer information
* The system shall track driver notes
* The system shall recognize distinct customer packages
* The system shall print activity reports
* The system shall create customer accounts
* The system shall manage customer accounts
* The system shall download an offline report
* The system shall create an alert when relevant DMV data is updated
* The system shall create an alert if there is an outage or issue within the system

### 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.)?*

* All interfaces shall accept input from mouse and keyboard, as well as touch screens
* The interface shall prompt users to enter their username and password combination
* The interface shall alert the user if the username-password combination is not valid
* The interface shall display a page containing information and links relevant to the given user
* Pages shall conform to the parameters of the display that they are being sent to
* The interface shall display a page containing contact information for DriverPass A system owner’s page shall display an interface to
* A customer’s page shall display their progress with DriverPass
* A customer’s page shall display an interface to choose their package
* A customer’s page shall display an interface to schedule an appointment
* A customer's page shall display an interface containing their account information
* A customer's page shall display an interface showing any special needs, their driver’s photo, and their photo
* A customer’s page shall display an interface showing their driver’s notes
* A secretary’s page shall display an interface to schedule appointments for customers
* A secretary’s page shall display an interface to update customer information
* A driver’s page shall display an interface to update their notes about a customer
* An IT officer’s page shall display an interface containing alerts about outages within the system
* A system owner’s page shall display an interface to enable/disable package options
* A system owner’s page shall display an interface to print an activity report
* A system owner’s page shall display an interface to update/delete accounts
* A system owner’s page shall display an interface to download an offline report

### 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?*

* Users will have internet availability while using the system
* Users will have access to a web browser

### 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?*

* Offline work done by the owner cannot affect the data located on the server
* Modules cannot be added to the system without a developer or systems analyst

### Gantt Chart

*Timeline

Description automatically generated*