# 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 is ‘DriverPass’ and the owner is Liam.
* The purpose is to develop a new system for training students for the driving test at the DMV.
* Must be able to access data from anywhere, online or download for offline use.
* Must have a record system to keep track of everything as well as create reservations.
* Systems must be kept up to date with DMV standards.

### 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?*

* The problem DriverPass wishes to fix is the void in the market when it comes to training students for the driving test at their local DMV.
* Decrease the amount of people that fail their driving tests at the DMV.
* Create a system that allows for online classes and practice tests.
* Provide on-the-road training if one desires.

### 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 data to be accessed remotely and securely. Along with being able to securely download data for offline use which then syncs up when back online.
* Ensure proper security measures are in place for different employees. Ian needs full access over all accounts, for example.
* Must have a records system that keeps track of each student and their reservations.
* Allow the ability to create reservations for driving lessons. This would include the day and time of when they wish to partake in a lesson.
* Reservations for lessons should have 3 different packages and keep track of time spent throughout the package duration for each student. Potentially creating a flexible one in the future.
* Ensure the system keeps up to date with local DMV restrictions, standards, and practices.
* System should be run off the cloud and not deal with backup and security.
* Interface should resemble the wishes of Liam’s drawings.

## 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 environment needs to be cloud based.
* Must run efficient enough to be ran on mobile devices on top of desktop devices.
* System must be updated automatically to ensure that compliance with DMV standards is met. Must be connected to DMV systems.

#### 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 needs to run on all major platforms including Windows, Mac and Unix based OS’s.
* A database must be used to store user information as well as schedules.

#### 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?*

* Each user must have a unique ID number associated with their account, cannot be personal details such as license number to increase security.
* The system should inform admin of a problem.

#### 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?*

* IT admin/officer must have access to modify the system, maintaining it.
* Owner must have access to all accounts to have permission to reset them if necessary.
* Updates should be rolled out after proper testing.
* Modifying accounts should not change code, it should change the database information.

#### 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?*

* Users must have a username and password for signing in.
* If the user forgets the password, the owner (Jennifer) will reset the account.
* If there is a brute force hacking attempt, the account will be locked after 3 failed attempts and must be reset by the owner.

### 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.”*

### User Management

* The system shall allow the IT admin to manage accounts, including a full reset.
* The system shall lock a user account after failed password attempts.
* The system shall store information of the users scheduled drive, car, and personal information.
* The system shall store information for where the customer wants to be picked up from.
* The system shall ask the customer for a drop-off location.

### 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 system shall be run off over the cloud.
* The user interface shall display online test progress.
* The user interface shall display user information.
* The user interface shall display driver notes.
* The user interface shall display special needs.
* The user interface shall display driver and student photo.
* The user interface shall change depending on the type of user logged in (Student, IT Admin, Owner, etc.)

### 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 system will automatically be sent updates according to DMV standards.
* The users have access to the internet.
* The users understand computer usage.
* The backend cloud system will have security features and safe to use.

### 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 core system design must be modified by experiences programmers.
* The system will have a presumed cost for cloud services, which is unknown currently.
* The system requires an internet connection.
* The system must be delivered May 9th.

### 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.*

