# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## 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?*

* DriverPass had identified a problem within the market for driver’s license tests. The observed that there is a lack of tools available on the market to help people pass their driver’s license exams.
* DriverPass wants to develop a program that will feature practice exams in an online format and can also schedule an appointment for 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 would like to be able to help those who have failed driver license exams, or better prepare first time testers.
* The intention is to provide practice exams, learning modules, and the ability to schedule an appointment for road training.
* The system needs to meet industry standards in regard to login requirements and access to the available data.
* Also, the software should be able to track appointments, changes to appointments, and cancelations.
* DriverPass wants there to be three training packages available for the road training.

### 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 website site will allow users the ability to take practice exams.
* Users have the ability to access the online classes that will be available
* The web application will allow users to schedule appointments, modify appointments, and cancel appointment for the on the road training.
* The program will allow access to based on assigned user roles (i.e. someone will have access to make changes to upgrade the modules or to remove things that are obsolete)
* On operating platform needs to be designated, along with the programing language (the client has stated they want a cloud-based system)
* Training packages will be customizable in regard to removing or adding new packages depending on the needs of the company.
* Will be able to connect with the DMV databases for updates to policies and rules as they change.
* Ability to print reports and designated person will be able to reset a user’s password or close an 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 environment should be web based; this would be the most accessible platform for users to access the software. Because a web-based application is accessible from almost any type of device that has internet access means it is more accessible to more people without having to download specific software. The software should also be able to handle multiple accounts at any given time. Allow the software to work offline or online for administrative staff and company owner. Results and other information (include updates, schedule changes and grades on practice tests) to be updates in real time. Ability to update weekly or monthly for security updates (as needed)

#### 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?*

This application should have the ability to run on Mac, Windows, Linux, and Apple platforms. The tools that are used to support the back end, such as databases will be cloud based. This application will also allow data to be collected and stored.

#### 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?*

* User names will be unique to each account.
* Each user will be assigned a unique ID

1. If username already exists the new user will be prompted to select another name
2. Allow numbers, special characters, and case sensitivity

* The user will be allowed 3 attempts to enter the correct ID

1. ID should be case sensitive
2. IF all attempts fail an administrator will have to unlock the account
3. Two factor authentication is recommended

#### 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 department will have full access to the system, to implement updates to the software and security.
* Administrators will have the ability to ass, delete, and modify existing users contained with in the system. Administrators will be assigned a unique users name and password for access to these features.

#### 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?*

* Each user ID will be unique and have a password associated with it. The password will be case sensitive and should include numbers and special characters, also the password will be of a specific length.
* To increase security the software will run on a cloud-based system. Using a cloud-based system allows for software backup and additional security protocols.
* If an account is hacked the account should be resent and the password will be changed.
* Administrators will have the ability to reset a customer’s password in the event that the customer is locked out of the account.

### 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.”*

* Accessible with laptops, desktops, tablets, etc.
* Include DMV policies and regulations that are up to date
* Usernames will be unique
* Utilize credential information for each user when accessing
* A schedule with available times for users to select
* The software will contain study guides and practice tests
* Progress reports for each user (These will detail weaknesses and strengths
* A place for trainers to provide comments, notes, and feedback for each student
* Have the ability to add, delete, and update customer accounts
* Provide available trainers for practice road tests

### 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.)?*

* Shows progress of online tests
* Demographics of individual users
* Student photos
* Driver instructor photos, feedback, and comments
* Scheduling of practice exams and driving tests
* Allow user to edit their information, schedule appts and contact administrators through email or online chat feature.
* Allows login from multiple devices to include tables, computers, and smart phones (cannot access on a flip phone)

### 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?*

* That all users creating an account or accessing the site currently use computers or mobile devices
* That the user currently owns a device that is compatible to the software being created.
* That the users are using this program themselves and not taking the classes for someone else.

### 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?*

* This is not an approved course of training for parent taught or online drivers education. This software would have to be accredited with each state to be used as a certificed drivers education.
* There may be issues with the timeline available to complete all the required work, and to find any defects in the code.
* Also the testing timeline is short, and this could cause problems.
* Access to each states guidelines might be problematic as not all states have their information in an easily accessible format to incorporate into the software.

### 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.*

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