# 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?*

* The purpose of this project is to provide student drivers with adequate practice and training before taking their online and in-car driving tests. The client of the project is DriverPass and they want their system to display student information, what they’ve completed and what they still need to complete as well as notes from the trainer during in-car sessions. The client also wants the application to include practice tests that allow the students to study.

### 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 requires that the system help to better prepare student drivers for their driving exam, both the online exam as well as the on-road test. The problem that needs fixed is the fact that too many student drivers fail their driving tests on the first try. This application will provide practice tests and in-person training to better prepare the student to pass the test on the first take. The different components of the system include the online content for the student to study, a progress bar showing what the student has completed and what still needs to be finished before they are ready to take the test, the login details of each student/user. Also, the security aspect of the system that authenticates each user. The packages available to users are also part of the components list. An additional component that is needed for user information and progress data would be a server; This would store the data for each individual user as well as the data that goes into their account once they’ve completed a section of their 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?*

* DriverPass wants a system that provides principles for student drivers that help that to accomplish given objectives before taking their first driving test to earn their license. The client would like the student progress to be displayed within the students personalized account along with their information including, how they may be reached, email, address, payment information, etc. The client wishes to have trainer notes included in the student drivers progress to inform each student what they are doing wrong as well as their strengths. The system should also be able to open up and grade practice tests taken by the students; Students should be given access to update their profiles when and if necessary. Finally, the program should give security and administrative staff the access to add and remove accounts on an as needed basis.

## 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 for this system would be web-based to run for the customers; The system should be able to hand various customer accounts at once so to keep students happy and able to practice for their driving test. As for administrative staff, they need to be able to access this system from web-based environments as well as the ability to access the system outside of the internet; Administrators should have the ability to access and update system data from anywhere, both online and offline. The system should be updated when a change in the DMV is notified to the DriverPass client.

#### 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 application should be able to run on Windows and Apple platforms; The back end tools like databases to support the size of the application will come from using the cloud online; The cloud will provide the space needed to run the program, and also the security and backup needed to keep the client and customer information safe from unwanted solicitation.

#### 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?*

* To distinguish between users, each user must have a unique user name and code; If a new user tries taking a name that is already assigned, the user will be notified to pick a username that is not already in user. The input can be case-sensitive to ensure total uniqueness with no confusion from user to staff. The system should automatically inform administration of any problems with accounts and/or faults in the system. This will ensure that the system stays up-to-date and online longer.

#### 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 administration will need full access to make platform updates and bring the system back online. Administrative staff will also have full access in order to delete or modify existing user accounts within the system. In order to do this, admin, like every other users, will need to log in with a unique username and password. Once authentication is

#### 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?*

* In terms of security, each user, both customer and staff of the system, will need a username and a password in order to access the content of the DriverPass system; To secure the information connection between the client and the server, the client has requested that the system runs over the cloud on the internet; This route offers backup and additional security to the client and the customers of the system. Should a customers account be “hacked” or broken into, the clients account should be reset, or in the least, the password should be reset to keep anyone from soliciting the customers information. Should a user forget their password, the staff of the application have the ability to make and appointment and reset the customers password so that he/she can regain access to the sites content.

### 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 be accessible through laptop and desktop computers.
* The system shall include up-to-date DMV driving policies and regulations.
* The system shall incorporate unique user names to ensure that no one is confused for another.
* The system shall involve validating user credentials when logging in.
* The system shall contain schedules to help students decide which available times work best for them.
* The system shall contain practice tests and information for the student to study and practice for their driving test.
* The system shall cover individual progress reports for each of the students to highlight their strengths and weaknesses.
* The system shall contain trainer notes and feedback to ensure that the student gets the best learning experience.
* The system shall number updates as it grows with new users.
* The system shall add new/delete/update customer accounts on as needed basis.
* The system shall comprise of security protocols to ensure that accounts are not solicited.
* The system shall encompass easy to understand layout for users.
* The system shall cover available trainers for customers ready for driving sessions.
* The system shall involve user pictures for customer distinction.
* The system shall be able to work online and offline for product owner or administrative staff.

### 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 needed for different users must include personal information of each user to their account; The different users within the program will include student drivers, and the staff of the application; More specifically, the staff of the program include the driver trainers, office staff to answer phone calls and make appointments and create accounts for customers, and answer any questions that someone might have; Administrators need to be able to log into the application to go in and make changes and updates to the system when needed; They would also make changes to customer profile by deleting profile that are no longer needing the system, or the administrator can add customer accounts. Finally, the security team of the system need to be able to log in and make sure there are no bugs in the security part of the system. The security team needs to be able to go in and fix any security issues that come up as the system runs.

### 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 assumptions that I am making about the users’ technology includes that each of the users needing to learn the rules of the road and to have practice, have a desktop or laptop. I also make the assumption that each of the users have the money to spend on a given package offered with DriverPass application. I assume that each of the users need driver training to get better on the road, however, that may not be the case for some users.

### 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?*

* Some limitations for this application might include the fact that it will be built for desktop computers and laptop computers; Customers/users won’t be able to access the application from their smart phones for some time. Eventually, DriverPass will think about expanding their business to reach other popular platforms, however, for now, the application is available for computers, both desktop and personal.

### 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.*