# 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 make a program for the client DriverPass that its owner Liam and his IT officer Ian have described. The Program is a system for helping to train students to be better drivers.

### 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 the program to be a user friendly one that they can modify in the future if need be. They want it to be a web-based program that preferably works from cloud storage. The problem, as they see it is that is that there is a major hole in the market with respect to the scope of training new students for their driving tests. They want it so they can have practice training and on-road training as well so that we have better trained drivers on the road. Different components to this program will be the ability to change it if needed and to update it with new knowledge from the DMV. Also, the ability to update information from anywhere there is internet. The ability for Liam to change password info if someone forgets it, or to remove it if someone is no longer there. It will have the ability to schedule driving appointments and have the ability to add and remove learning modules.

### 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?*

* When it is complete it should be a fully integrated program that will allow a student to take driving classes online and to choose between 3 different driving packages. Each session will be for two hour and the three packages will be - Package one: six hours with a teacher. Package two: Eight hours with a teacher and an in-person lesson to go over DMV rules and policies. Package three: twelve hours of driving training, the in-person DMV lessons plus access to the online class with all material.

## 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 in a web-based system that works with all modern platforms, such as Windows, Linux and applications for phone and tablet.
* The system should work at a fairly quick rate.
* The system should be updated as often as it needs be and any time there is a new bit of info that needs to be added.

#### 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 main platform should probably be windows as it is the most widely used system, although it should also have Mobile apps for Android and IOS as well.
* It should work on all current types of browsers, such as Google Chrome, Firefox, Silk, Safari, and Microsoft Edge, etc.
* Backend should definitely have a date base and cloud storage and a way to store all user info into the system.

#### 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 should have a different username that does not repeat for each person that is case sensitive and a Password that is also case sensitive.
* The system should inform admin of any log in problems and if someone tries to enter the system multiple times unsuccessfully.
* System will log itself out if user is not on for a specified amount of time.

#### 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 will need the ability to be modified at all times so that it can be updated with new information.
* The system will need to keep up to date with all new browser and app updates.
* IT Admin needs to have full access to the entire system, so they can fix any problems with it.

#### 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?*

* For a user to log in they need to have a current case sensitive Username and Password.
* The system need the latest security software to protect itself from those that are outside the system that are trying to Hack into it and steal sensitive information.
* The system will have the ability to lock out anyone that tries to enter the system unsuccessfully at least 5 times.
* User will have the ability to change password if they provide the correct email address and username and at least one secondary personal question.
* The system will have a secure payment system.

### 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 will validate user info when they log in.
* The system will have a connection to the DMV’s current information.
* The system shall update student information and how far they have progressed within the system.
* The system will have a message system between student and teacher so they can keep in contact with each other.
* The system will be able to be accessed from all web browsers and apps.
* The system will show the student all the different packages that are available to them.
* The system will have a secure payment system in place for buying different packages.
* The system will have full access to the program lessons and videos of their current package.
* The system will have pictures of the student and the teacher so they can recognize each other.
* The system will have the ability to be changed at will by the administrator.

### 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.)?*

* Users will have the ability to create an account and create a password and change it if the right credentials are given.
* Users for this are administrator, teachers and students.
* Users will have access to all thing relevant to them, like their account info and course info.
* Student users will be able to see everything that pertains to their lessons, scores and progress in the course.
* Teachers will have access to student info, course info and their own lesson information.
* Admins will have access to everything.

### 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 have full internet access.
* Users have a device with which they can access the system such as a computer.
* All students and teachers will show up for any in-person appointment.
* All users have the tech savvy needed to use the system.
* Students will keep up to date with their lessons.

### 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 students may have time constraints that interfere with certain parts of the program.
* Students may only know how to drive automatic cars.
* Some students might have budgetary constraints.
* DriverPass only has so many vehicles to use at one time.
* DMV can update their systems at any time and DriverPass needs to be ready for that.

### 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.*

