# 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 create a system to assist our client by the name of “Driver Pass” help failing student’s pass their driver’s test by providing them with online classes and practice tests and in person on-the-road driving lessons.

### 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?*

* Driver Pass wants the system to allow for the access of data from anywhere, online as well as offline. Driver Pass also wants to be able to access data online from any computer or mobile device. For security purposes the boss of Driver Pass Liam needs to have full access to all of the students/user’s accounts in case of password reset needs as well as blocking access from users. Liam the boss of Driver Pass also needs access to tracking of the system to account for who made and cancelled driving lesson reservations. Liam would also like to be able to print activity reports of the driving lessons reservations and cancelations.

### 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 the system is completed, it should be able to be available offline and online and be accessible via mobile device or computer. The system should be set up in a way that the boss has full access over all accounts and data while the other employees have different access right pertaining to their respective role in the company. The boss should have the authority of revoking access from any employee should they be terminated. The system should allow for the ability to track which customer made a reservation and what customer cancelled or made a modification last. The boss Liam should be able to print out a driving lesson activity report to figure out who is responsible for any changes made. Within this system the customers need to be able to make reservations for their driver’s lessons. The customers should be able to input into the system what day and time they want t schedule their driving lesson for. The system also needs to pair a customer with a one of the 10 driver’s that works for the company who is available for the allotted time of their lesson, as well a what vehicle will be utilized for that particular session. In this system the customer should be able to choose between three of the driving lesson packages offered by “Driver Pass”. Package One consists of six hours in a car with a trainer. Package Two consists of eight hours in a car with a trainer and an in-person lesson where Driver Pass explains the DMV rules and policies. Package Three consists of twelve hours in a car with a trainer, and an in-person lesson where Driver Pass explains the DMV rules and policies and the customer will have access Driver Pass’s online class with all the content and material which includes practice tests.

## 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 will need to be run in a web-based environment and will need to be a high-speed website because of how much traffic that will be on the site at once between employees and customers of Driver Pass. The system will need to be updated regularly to account for bug fixes, software security, and changes made to employees or member’s access.

#### 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 website should be able run should be able to run on platforms like Windows and Unix. Unix is a multi-user operating system that allows more than one person to use the computer resources at a time. This would be prefect for Driver Pass which will have multiple users on their site at any given time. There should be a database to support the application on the backend because of Liam’s desire to print out activity reports.

#### 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 will distinguish between different users by way of usernames and passwords. Upon entering the site for the first time the user will be greeting with a sign-up page that allows them to fill out information like their full name, date of birth, email address and phone number, they will also create a username and password. Email verification will be used as a way to make sure that we have accurate contact information attached to the user. The input for the system will be case-sensitive. The system should inform admin of a problem when they are too many sign-in attempts, when there are bugs in the system, or system glitches.

#### 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 allow for changes to the user like adding, removing, and modifying without code change. The website will have to continuously be updated to accommodate to the growing company’s needs. The system will adapt to platform updates by having set system maintenance times that users will be alerted of. IT admin will need to have access to databases and servers and will also need to have access to user’s profile should they have problem with their log in or password and need help resetting.

#### 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 site the requirement for the user to log in is they will have to create a username or password. In order to secure the connection, the cloud will execute the exchange of data between the client and the server. What should happen with the system if there is a brute force hacking attempt is that the system should lock out accounts after a certain number of incorrect password attempts. If a user forgets their password there should be a forgot password link that redirects the user to a page where they can input their email address t have the system send them a password reset link.

### 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 run in a web-based environment and run at high speeds.
* The system shall be able run should be able to run on platforms like Windows and Unix.
* The system shall distinguish between users and validate user credentials.
* The system shall allow for users to make driving lesson appointments and modifications.
* The system shall allow for user to take practice exams and courses.
* The system shall allow for driver lessons reports to be retrieved.
* The system shall lock out a user after multiple sign in failed attempts for security purposes.

### 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 needs of the system interface is that it needs to be web-based a allow for multiple users to be on the page at any given time. The different users of this interface will be the management of Drivers Pass, the IT Team, The Development Team, and Drivers Pass customers. The user will need to be able to sign up for an account by creating a username and password, the username will also need to be able to purchase access to online classes, and practice test as well as purchase driving lessons via the site. The user will need to have the ability to choose driving lesson session times and also be able to modify or cancel their driving lessons. The system should allow the user to interact with the interface via a mobile device like a smartphone, tablet, laptop and desktop.

### 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?*

* Things that not specifically addressed in my design above is that the system will have to be connected to internet in order for the user to have access to it. The system will also be compatible with different browser types. The assumptions I am making in my design about the users is that I believe that most if not all users will be accessing the website via a mobile device.

### 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?*

* Limitations in this system may be the ability for it to work both online and offline which is a request that Liam the boss had. As far as the budget, there was no budget given as a reference point for how much money is expected to go into the building of the system. Resources like Developers may be hard to come by as this project may need more than one. The time constraint may also be a limitation with having to flesh out, develop, test and fix the system in a 16-week turnaround timeframe. Technology may be a limitation due to the fact that we might not had the robust technology to create all of the client’s needs.

### 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.*

