# 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?*

* Liam, the owner of DriverPass, wants to take advantage of a void in the market when it comes to training students for the driving test at their local DMV by building a new system. Liam wants better driving training. He wants the students to be able to take online classes, practice tests, and provide on the 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?*

* DrivePass wants to access data online from any computer or mobile device and be able to download reports and information. DrivePass also wants the system to make reservations, obtain user information, identify the driver of the customer, to enable and disable packages, and to display different packages. DrivePass is trying to fix the need for better driving training. They want to create a system to have practice tests, user information, and self-registration all online.

### 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?*

* DrivePass wants to access data online from any computer or mobile device and be able to download reports and information. DrivePass needs to know who made a reservation, who canceled it, and who modified it last. Customers need to be able to make reservations for driving lessons and choose the time and day for that lesson using their online account. Customers can also call or visit the office to make reservations. DrivePass also needs to be able to identify the driver the customer is scheduled to go out with. DrivePass needs the ability to enable and disable packages.

## 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?*

* This will be a web-based system with the backend servers used by various browser clients. The system needs to run fast since the application will be network intensive. The system should always be up to date any time progress is made from any user.

#### 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?*

* Since the system is web-based, it will work on all operating platforms. The browsers we will develop for will be: FireFox, Safari, Chrome, Microsoft Edge, and Internet Explorer. The backend will need a database to keep our users data and progress.

#### 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?*

* Different users will create their own accounts with unique usernames and their own protected passwords. The input will be case-sensitive since no users can have the same usernames. The system should inform admins of a problem when it first arises.

#### 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?*

* All system users will be able to create and add new accounts without changing any code. All users will also be able to modify or remove information without changing code. Updates will be made when the client’s updates effect the systems behavior. The frontend updates will be made when there are little to no users on DrivePass. The IT admin will need full access.

#### 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 user needs to enter their unique username and password to login to their account. We can secure the connection between the client and the server by using HTTPS. We can also encrypt the users data when it is communicated across networks. To stop a “brute force” attempt to hack an account, we can limit the user to three login attempts before they need to reset their password through their email. If the user forgets their password, they can request an admin to change it by providing other unique information(email, name, birthday) or can request a “reset your password” link sent to their email.

### 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 web-based.
* The system shall require user authentication.
* The system shall track user activity.
* The system shall list three DrivePass course packages.
* They system shall provide a detailed activity report.
* The system shall allow packages to be disabled.
* The system shall ask for a user’s unique username, first name, last name, email, phone number, and address.
* The system shall provide instructional material.
* The system shall provide feedback to students.
* The system shall allow users to reset passwords.
* The system shall allow users to reserve driving times.
* The system shall display user progress and grades.

### 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 needs: a homepage, account registration/login page, course material page, driving lesson reservation page, account info page, and a support contact page. The students will need to be able to login to their account, access learning materials, reserve driving times, take exams, schedule appointments, and modify their information. The DrivePass owner needs full access to all accounts and data. The IT admin needs full access to all accounts and data. The system is web-based so the user can interact with the interface on mobile or 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?*

* The user, DrivePass, and website has access to the internet at all times.
* The users have a working device that can access the internet and use the appropriate browser.
* The exams and course materials are up-to-date with DMV guidelines.
* We are assuming most of the users will be young and know how to use technology so the website will get much more traffic than the office.

### 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 system relies on network connectivity.
* Physical servers are very expensive with cost and maintenance.
* Budget will determine whether to use the physical servers or a cloud architecture.
* Budget will determine how much staff DrivePass will have.
* The time limitations will determine when the project needs to be completed.
* The skill set of all staff will effect the budget and time of the project.

### 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.*

