# 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 students that are studying for their driver’s test access to a set of tools that would help them study and practice for the exam. DriverPass, the client, would like their system to have a user account system for the students which contains the study tools they provide as well as a data tracking system.

### 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 is aiming to have this system be an all-in-one study guide for people taking their driver’s test, this combines online studying tool with in-person training. To accomplish these goals, we need to have the interface interact with the user via an account with a detailed account of the user in order to track their progress and assess their needs. To allow for the interactive learning tools that DriverPass desires we would need to look into embedded applications, meaning a server allocation would most likely be needed to host all of this.

### 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?*

* This system needs to provide a set of objectives for the student complete, as well as display their progress toward said objectives. For this to perform efficiently Users will need to create an account upon initial visitation to the site, containing billing information as well as date of test, and email address. The client will need the ability to provide feedback as well as grade each of the practice examinations. Lastly the set up of administrators is crucial, allowing them to edit accounts if necessary and to access security functions.

## 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 system will need to be web-based to ensure ease of access for the client as well as users. Performance is the top priority of this system, alongside the embedded applications for online training as previously mentioned. The system will need to have an account set up for the local DMV for guidance when updating. This should be a bi-annual check for the DMV to keep everything updated properly.

#### 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 system should be able to run on both windows and apple platforms. The back end will require a database, most likely cloud based, that is expandable to grow along with the addition of new clientele. This will also include security measures to protect personal data of the clients.

#### 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?*

* Some unique identifier must be put in place to determine a standard User account from an admin account, this would occur during account creation. The input will be case-sensitive as most user/pw combinations are to enhance security. Upon issues arising such as a locked account or inability to progress through standard functions an administrator will be notified.

#### 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 IT admin at DriverPass will need the ability to update the system and its data as needed and possess the ability to take the system on and offline if needed. Admin need the ability to delete extraneous data and modify user accounts as needed. These changes all need to be doable without a change in the code.

#### 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?*

* A unique username and password will be needed for each User to log in to their account. The cloud server that is being implemented will secure the data exchange between the client and the server. Password entry attempts should be hard capped, forcing a lockdown of the account once that limit is reached. Admins should be able to customize this number, and they should be alerted when an account lockdown happens. When someone forgets their password, they should be able to click a link and be taken to a data verification page where they can get an email sent to them to reset the password.

### 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 via laptop or desktop.
* The system shall assign unique usernames.
* The system shall validate user credentials upon login.
* The system shall include current DMV policies and regulations.
* The system shall include a schedule to help students find times that work for them.
* The system shall include practice tests/activities and information for the students.
* The system shall include progress reports for the student to reflect on.
* The system shall include trainer notes to pair with the progress reports.
* The system shall include numbered updates as they’re pushed to track changes.
* The system shall keep up to date with user accounts and deactivate old ones as the students pass the test.
* The system shall put in place strong security measures to protect personal information.
* The system shall function in an easily accessible format.
* The system shall connect trainers with students that are ready for in person driving sessions.
* The system shall be able to function offline if the IT admin needs to take it down for repairs.

### 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 to have ease of access and be user friendly to best suit the customer. The different users are the customer/student and admin accounts. The student will need the ability to log in easily with their own credentials, find their activities online and complete them, read the feedback and reports, find and schedule driving slots, edit their account info as needed. The user should be able to access the system via most common web browsers as well as be able to access it via mobile web browsers.

### 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?*

* This is all being assessed assuming that customers can afford this service and have the technological means to access the service at home as well.

### 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 system will be based in a web-based environment initially catered to desktop users. Therefor the importance of mouse and keyboard will make full utilization of the site impossible on mobile for the time being. However that can be addressed in the future, and at the moment mobile based browsing can be used for checking progress, notes, and scheduling.

### 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.*

A graph with a number of rectangular objects

AI-generated content may be incorrect.