# 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 the project is to design a system for DriverPass, that allows to study and train for their driver’s test. The system will allow users to manage their account and appointments, as well as study online.
* The website will be managed by the owner as well as other assigned employees. They will be permitted access to view appointments, make notes, check schedules, etc.
* The client for this project is Liam, the owner of DriverPass. Liam wants his system to allow people to enroll in online or in person courses that will prepare them for their driving test. He would like the system to allow the user to make a profile and be able to manage it.

### 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 this system to provide their students with access to online and in person training to prepare them for the driver’s test. The problem they are looking to fix is to minimize the amount of failed driver’s tests at the DMV, by providing students with more access to online and in person training to prepare them before taking the test. Different components needed for this system include online training, practice exams, and on-the-road 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?*

* When this system is completed it should be able to:
  1. Provide students with a user-friendly experience online to manage their data, study, and take exams.
  2. Provide up to date study material and practice questions from the DMV.
  3. Have a database to store all student/employee details, notes, and scores.
  4. Have a database to store all scheduled driving sessions.
  5. Provide students with notes and their scores from their practice exams and on-the-road training.
  6. Track students’ progress.
  7. Allow students to manage their scheduled training.
  8. Allow students to choose from provided training packages.
  9. Allow the owner to manage their employees’ access.
  10. Allow the owner/employees to help students recover their profiles if forgotten password.
  11. Allow employees to update student’s profiles, when contacted through phone or email.
  12. Provide system security so that DriverPass can focus on drivers training.
* To achieve this system design, following this list should help the designers to create a schedule to accomplish each task in order based on their priority.

## 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 is web-based and needs to be able to run on all modern web browsers.
* The system should be able to handle an increasing number of users without it slowing down.
* The system should be updated and maintained once a month, to check for updates and maintain security.

#### 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 run on modern platforms that include windows, linux, and macOS.
* The website she be adaptable to multiple device sizes, so that the user can access from multiple devices.
* The back end requires a database and tools to manage the database that will store user data.

#### 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 different users the system will needs to use unique identifiers, such as unique username and password.
* Input case-sensitivity is needed to help protect the user’s data.
* The system should inform the admin of a problem after the user’s data has been entered to many times and failed. The limit would be set for failed attempts, once failed attempts is reached, the user will need to contact for support, as well as a notification should be automatically sent once reached.

#### 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 allows changes to be made to the user without changing the code.
* The system will adapt to platform updates automatically.
* The IT admin requires full access, so that they may be able to maintain the system.

#### 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 the user to login they must enter their username and password. If the user forgets one or the other, they can use their email to retrieve a code to login and reset the username or password.
* To secure the connection or the data exchange between the client and the server the system should:
  + Have a max allowed failed attempts for logging in to account.
  + Once max is reached, a notification will be sent to admin and the account will be locked.
  + A link can be emailed to user to reset password if failed to access.

### 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 validate user credentials when logging in.
  + The system shall review and validate user application.
  + The system shall review and validate user drivers license and insurance card.
  + The system shall store and manage the user’s data.
  + The system shall calculate scores and provide a visual based on scores inputted by the instructor.

### 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 be easy to navigate for the user, and must be able to adapt to multiple devices, without losing its ease of use.
* Different users for the interface include the driving students, the instructors/admins, and the IT Admin.
* The students will be able to create and manage a profile, schedule in person lessons, view their documents and scores, and contact the admins.
* The instructors/admins will be able to create and manage their profiles, look at schedules for lessons, post scores for each student, help update passwords for locked out users.
* IT admin should have access to the entire website, so that they can update the code, make updates, and make changes.
* The user will have the best results using the interface on a computer using any modern browser. However, the website should be adaptable and be able to be used from multiple different devices.

### 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 not specifically addressed in the design above could be, if the user has access to the internet, or a device where they can access their profiles.
* The skill level of the students and instructors, when it comes to using and maintain the system.
* If the user has consistent access to a device with internet, so they can stay up to date with their courses and in person 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?*

* Limitations in the system could be lack of funds to finish the project and meet all requirements.
* Lack of time to finish the project if changes have to keep being made.

### 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 group of people's names

Description automatically generated