# 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?*

* To establish a design for a new tool for a client, DriverPass
* The tool should be able to provide assistance and education to their clients

### 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?*

* Provide Educational resources for driver education to reduce the 65% of current students that fail their drivers license exam
* Provide scheduling for On-The-Road training classes

### 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?*

* Administer practice exams
* Serve educational materials and guides
* Maintain organized scheduling for OTR training

## 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?*

* Web-based served from AWS or Azure for dynamic sizing and performance based on live demand.

#### 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?*

* Any web-based solution will be compiled for either windows or linux depending on the cloud platform selected
* Databases for client credentials and records, scheduling, and an audit database

#### 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?*

* Users will use email address and password for credentials as most all systems use, which does not contain case sensitive usernames but does require case sensitive password input.
* The system should only notify an administrator if it stops performing a function correctly or if a user reports to the administrator that there is a problem.

#### 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?*

* Any time you create a system that has users, you create pages to add, modify, or delete users of that system, whether they are registration pages or administrative pages to create, modify, or delete users. These actions should always make an audit entry for changes made and why whom.
* Platform updates to something like C# are independent of the running code and can be done as necessary to maintain security protections with security updates. IT admin would need all access as that is the admin.

#### 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 username and password and if the client requires higher security then two-factor authentication would be implemented.
* Using Https and valid security certificates with encrypted communication between client and server can provide reasonable security for this project.
* If more than ten attempts are made within a six hour period the account will be locked out
* There will be a forgot password option that allows the client to send a reset link to their email account on file.

### 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 during the login process
* The system shall provide links to government and educational sources of information related to drivers licenses and exam taking aid.
* The system shall provide tools to create, modify, or cancel OTR training appointments.
* The system shall provide administrative access to modify client appointments
* The system shall notify clients of changes to appointments and send reminders

### 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.)?*

* Interface needs to provide graphical access to the functions listed in the functional requirements.
* Clients, Administrator, General Staff, and Support(I.T.) roles for user accounts
* Web based applications can be installed as progressive web apps when using C# .NET and other modern web and cloud development tools and languages.

### 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 technology must have web access
* The technology must be running windows 7 or later with IE 11 or newer, or similar capabilities
* The users must have basic intellect and knowledge of how to use websites and login system norms.

### 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?*

* Time limitation of 108 days planned for completion
* No discussion of budget happened during the transcribed interview
* Technology limitations being that flip-phones would not be supported.

### 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.*

*Timeline

Description automatically generated*