# 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?*

* Provide an interface for DriverPass or their clients to enter information.
* A place to schedule times for behind the wheel training for clients.
* Packages for clients to choose from.
* Practice tests to help prepare the clients for the written portion of the driver test.
* Option to take online classes.
* Way to check status of tests taken and training done.
* Place for the drivers to write notes.
* Special needs section.
* Area to display Driver and Student photos.

### 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 an all-in-one place for people to go to access training for their driver test.
* Liam, DriverPass’s owner, needs access to everyone’s accounts.
* The secretary needs to be able to update clients’ information and schedule their appointments when they choose to call instead of using the mobile interface.
* Other employees need access to accounts based on their roles in the company.
* Liam needs to be able to upgrade and remove people’s access to the software.
* The system needs to be able to be accessible from any device with the internet.
* Everything that is done on the system needs to be tracked, this includes tracking who is making the changes.
* Clients need to be able to update their information, schedule appointments, choose different packages, take practice tests, attend online classes, choose pickup locations, choose drop-off locations, and pay for the different services.
* Need a cloud-based server to run the software, provide security, and store the data.
* There needs to be multiple web pages to handle.

### 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?*

* The system should be an all-in-one stop for clients to interact with DriverPass.
* A list of tasks was provided by Sam and Jennifer which included:
  + Collect Requirements: completed by Sam and Jennifer
  + Create Use Case Diagrams: Eight business days scheduled for Jennifer and Sam.
  + Build Activity Diagrams for Each Use Case: Worked on at same time as next step.
  + Research User Interface Designs: Nine days Scheduled for Toni and Clark.
  + Build Class Diagram: Nine days scheduled for John.
  + Get Customer Approval: Meeting scheduled for March 1st.
  + Build Interface: Twelve days scheduled.
  + Link DB to Interface: Nine days scheduled.
  + Build Business Logic: Twenty-two days scheduled.
  + Test System: TBD
  + Deliver System: TBD
  + Sign-Off Meeting: TBD

## 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?*

* All web browsers, Chrome, Safari, Edge, etc.
* Local use for super users
* Download capabilities to local devices, PC, Tablets, Mobile devices, etc.
* Monthly updates

#### 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?*

* AWS cloud service
* Microsoft OS for local backup
* AWS database service

#### 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?*

* Unique usernames
* Usernames are not case sensitive
* Unique user id #’s
* Admin notified when user created, or username updated

#### 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?*

* Super user has full access to edit all aspects of an account and reset passwords
* Users have access to edit their account, except for their ID #, can reset their password
* AWS will handle platform updates
* IT has access to edit accounts except user ID #, can reset passwords, can unlock accounts
* Staff has access to edit user information, and schedule appointments

#### 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?*

* Password must be 8-20 characters long
* Password must contain at least 1 upper-case and lower-case letter
* Password must contain at least 1 variable
* Account locks for 1 hour after 5 failed log-in attempts
* Account must be unlocked by IT if account is locked more than twice in 1 day
* Password reset option if user forgot password
* Two step authentication app available for use

### 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 allow users and staff to schedule appointments
* The system shall allow users to purchase packages
* The system shall allow users and staff to input account information
* The system shall allow users, IT, and super users to reset passwords
* The system shall allow users to take practice tests
* The system shall allow super users to remove package options

### 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.)?*

* Home page with different sections for deferent uses
* Pages set up for each section that the home page can redirect to
* Input sections for the user to inter information
* Link for the users to upload photos
* Touchscreen for mobile users
* Mouse and keyboard functionality
* Super users can deactivate sections and pages

### 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?*

* Internet access
* Web browser access
* Minimum system requirements to run modern browsers
* DMV information access

### 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?*

* Budget for cloud services
* Budget for web development
* Budget for system updates
* 5 months to complete project
* Hardware for development
* Software for development
* DMV information access
* Number of drivers and cars
* Number of staff and IT

### 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 screenshot of a project

Description automatically generated*