# 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

* The purpose is for a new client, DriverPass. The purpose is to provide better training for people to pass their driving exams.

### System Background

* The problem that the client wants to fix is that people need better training to pass their DMV driving exams.
* The client wants the system to manage online classes, practice tests, and appointment reservation for on road driving practice.
* The system will provide three different packages for road driving practice.
* The client wants to be able to disable packages.
* The client wants to be able to access data from any server and to access it offline.
* The system will run off the web (it will be cloud based).
* The system will track changes to practice reservations and manage activity reports.

### Objectives and Goals

* The system will allow provide users with the following functions:
  + take online driving classes
  + take practice tests for their driving exams.
  + reserve an appointment for on road driving practice
  + choose from three different package options to users.
* The team will have to perform the following tasks:
  + Create use case diagrams and activity diagrams, Feb 11 – Mar 9
  + Research user interface designs, Feb 27 – Mar 7
  + Create class diagram, Mar 1 – Mar 9
  + Get customer approval, Mar 10 – Mar 11
  + Create interface, Mar 12 – Mar 24
  + Link data base to interface, Mar 24 – Apr 3
  + Build business logic, Apr 5 – Apr 27
  + Test system, Apr 27 – May 7
  + Deliver system to client, May 8 – May 9
  + Sign off with client, May 9 – May 10

## 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 needs to run in a web based environment
* The system should be updated each time a new appointment is made
* The time the system takes to upload the appointment information to the system should be no longer than one minute.

#### 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 the platform Windows since more users are using a windows based system than any other system.
* The system will require its own database to store appointment information

#### 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?*

* Each user should have an email as a username and password and it should be case sensitive.
* Admins and technicians will be distinguished by their emails
* The system should inform the admin if any of the following occur:
  + Several appointments are being made by the same user within a short period of time
  + User’s password is reset more than 3 times within 30 minutes
  + Changes occur to system database through a non admin account

#### 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?*

* Users should be able to automatically change their password if they forget it
* Changes to the user can be made by the admin without changing code
* There will be a scheduled maintenance for the system to adapt to updates
* The IT admin should be able to update system code during maintenance and have access to users accounts to make updates as necessary

#### 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 system will require users to provide an email and password to log in.
* If the user forgets their password they should receive a link to their email to reset their password
* Old passwords cannot be accessed only reset
* All data exchanged between the client and server will encrypted
* The account should lock after 5 consecutive failed attempts at the password
* IT management must be contacted to unlock an account

### 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 receive and validate user email address and password
* The system shall display test progress, account information, company logo, notes, and photographs to user
* The system shall provide 3 different packages for the user to choose from
* The system shall allow users to take online driving tests and reserve driving appointments

### 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 able to display information on a screen and work with mouse and keyboard controls.
* The user may interact with the interface on a browser
* Different users include online for online test practice and in person for scheduling driving appointments

### 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 cost of the project was not addressed in the design
* It is assumed that the client online wants a browser application and not a mobile application
* The design assumes that clients have access to a mobile, laptop, or other browser accessible device.

### 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 is a limitation that will affect how the design will be implemented and how advanced it will be
* The client may not be able to receive completely updated information from whatever device the client uses if the client is offline
* The resources available may not be able to handle increased amounts of users and information

### 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