# 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?*

Client DriverPass with owner Liam. They want to create a better driver training System.

Is should be able to:

* Reservation
  + On the road training
* Practice tests

### 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?*

Since many people fail their driver test this systems components are aimed to fix that.

* Practice Tests updated from the DMV.
* Packages for on the road training
* The ability to make Reservations online
* The ability to make Reservation by phone
* Information about the customer

### 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?*

* Practice Tests updated from the DMV.
* Packages for on the road training
  + Three packages
* The ability to make Reservations online
* The ability to make Reservation by phone
* Information about the customer
  + their drivers test, status, scores, etc. displayed on a UI webpage.
* Password reset
  + Including security features
* Account reset
* Change appointment
* Cancel appointment
* Print activity report
* View assigned driver
* Disable account
  + Controlled by an admin
* Receive notification of appointment

## 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?*

Environments

* Web-based application
  + Should run Quickly
  + Updated routinely – for security and information purposes
* Phone based application
  + Should run Quickly
  + Updated routinely – for security and information purposes

#### 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?*

* Window
  + Mobile
* Macintosh
  + Mobile
* Linux
* Unix
* Databases
  + Cloud

#### 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?*

Different users should have:

* Unique User ID defined by
  + Name
  + Email
  + Username – must be unique
  + Random number
* Users Login should be allowed with
  + Email or Username – not case sensitive
  + Password – case sensitive
    - Phone for two step verification

Admins should be informed of any Bug, error, duplicate User ID number.

#### 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 should be set up in a way where user input should not modify the code.
* System should allow for updates and be flexible
* The system should allow for to IT access:
  + System updates
  + System maintenance

#### 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?*

In order to bolster security the following steps should be implemented:

* Password Encryption
* Certificate Authority
* 2 step verification
* The ability for Password resetting
* API updates and monitoring
* If multiple login attempts fail (over 5)
  + Account becomes locked
  + Option for password reset is given
  + Option for 2 step verification is given (if set up)

### 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 have a testing function
* The system shall have a lesson function
* The system shall allow for report downloading
* The system shall allow for password resets
* The system shall validate user logins
* The system shall validate admin logins
* The system shall allow for appointments
* The system shall allow for packages to be disabled
* The system shall update learning material from DMV

### 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.)?*

*Users: (interface: Web browser)*

* *Student* 
  + *Testing progress*
  + *User Information*
  + *Special needs*
  + *Driver Notes*
  + *See Driver Photo*
  + *Upload User Photo*
  + *Schedule Lesson*
* *Driver*
  + *Upload notes*
  + *Administer Tests*
  + *Upload photo*
* *Admin*
  + *Download reports*
  + *Reset passwords*
  + *Remove lesson packages*
* *IT*
  + *System Updates*

### 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?*

* Users will have an internet connection

### 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?*

* The timeframe is set at 15 weeks
* Working on mobile and computer

### 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.*

Chart, timeline

Description automatically generated