# 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 create a system that allows DriverPass to manage students and drivers/cars. The end goal is to teach student drivers to get them ready for their DMV tests.
* DriverPass is the client
* Students are the users

### 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?*

* Handle Reservations
* Manage student accounts and employee accounts
* Track actions and log them
* Billing information for the accounts
* Manage driving packages/sales
* Keep DriverPass in compliance with DMV policies

### 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?*

* Presentable interface
* Accessible online
* Manage reservations
* Manage accounts (student and employee)
* Log actions on the system
* Manage billing, driving packages, and sales
* Notify DriverPass when a change in DMV policies occur

## 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 project is a web-based application. It will be held remotely in the cloud.
* It should run rather quickly, but is not of top priority
* Corresponding system functions should be updated when any action occurs
* DMV checks should be checked once per day
* System updates should occur whenever need be

#### 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?*

* Windows is preferred application
* Cloud hosting is required
* A database is, also, required for this application. MySQL or Microsoft SQL is a good idea here

#### 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?*

* System will have two separate logins for users and employees.
* Users only have one role, so, no extra work is needed
* Employee roles will be linked to logins(username and password)
* Only password will be case sensitive

#### 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?*

* Changes to users will be a simple as a check mark to certain roles/accessibility options
* System will be modular as much as security will let it. It will be easier to integrate updates to the system that way.
* Large updates may need a complete reinstall of certain areas. Database will be separate , so that will not be affected.
* The IT admin needs full access to the system, minus employee termination options

#### 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?*

* Username and password will be required for login.
* The cloud hosting provider will take care most of the security.
* Logins and data will be encrypted to and from the server.
* If a certain account is found to ‘brute force,’ the IP will be banned along with the account
* An option for ‘reset password’ should be available in the login screen.

### 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 confirm user logins
* The system shall encrypt data to and from server
* The system shall confirm user actions
* The system shall validate user roles
* The system shall gather appropriate data for said user
* The system shall validate user billing information
* The system shall encrypt user data

### 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.)?*

* Present data that corresponds to the role of the user
* Student
  + Online test progress
  + Contact information
  + Driver notes per session
  + Special needs
  + Driver information
  + Student information
* IT Officer (Ian)
  + Maintain system
  + Modify system
  + Semi-Full access
    - Records
    - User Accounts
    - Logs
    - Reservation system
* Secretary
  + Medium Access
    - Records
    - Reservation system
    - Appointments
* Owner (Liam)
  + Available offline
  + Full access
    - Records
    - Logs
    - User Accounts
    - Reservation System
    - Revoke employee access
* Mobile will be shown in a list form, rather than side-by-side modules

### 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?*

* Student Account information
  + First name
  + Last name
  + Address
  + Phone
  + State
  + Billing information
  + Pickup location
  + Drop-Off location
  + Automatically reset password if need be
  + Schedule Appointments over the internet
* Reservation System
  + Time of day
  + Date of reservation
  + Be able to cancel
  + Be able to change
  + Locked to 2 hours
    - Should we implement a feature to change this?
  + Track what user is matched with what car/driver at what time
* 3 driving packages
  + One
    - 6 hours with a trainer
  + Two
    - 8 hours with a trainer
    - In person lesson with DMV rules and policies
  + Three
    - 12 hours with a trainer
    - In person lesson with DMV rules and policies
    - Access to online class (all content and practice exams)
  + Each driving session is 2 hours long.
  + Be able to disable a package if need be
* We are assuming students have access to at least an internet browsing capable device, if not a phone.

### 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?*

* Although the time limit is not clearly stated, given what was set by the requirements, a time limit of 16 weeks is set.
* No budget is given, but because it is a small company, a tight budget is highly likely.
* Depending on how complex the website and system are, we should have more employees working on 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.*

Chart, timeline

Description automatically generated