# 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 client is DriverPass, they need a web-based site on the cloud that can provide online classes and tests along with making in-person driving reservations with a licensed DriverPass driver
* Customers can purchase (as of now) 3 packages, but these packages need to have the ability to be disabled by an IT account, and a systems analyst must be able to go in and create new packages
* System must be able to receive tracking information about DMV changes, reservation creation and modification, what driver and car are assigned to a student on a reservation
* The system must allow employees to enter student account information such as: name, address, phone number, state, credit card number, card expiration date, card security code, and pickup and dropoff location (pickup and dropoff are same location)
* System must allow for low-level users to access automated password resets
* The client wants to be able to download reports about tracking info. Integration with Excel is preferred.
* System must allow IT accounts full access over accounts along with block privileges

### 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?*

* Main problem to solve is creating a system that allows students to take online classes and tests, along with driving reservations
* Components include: a main site, a reservation section which can be modified and tracked, a course section that allows student to track the progress of their tests, and options to register student accounts, control said accounts, and allow automated password resets for accounts

### 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 have several pages when completed. An area to track student progress and driving reservation, An area to modify reservations or create them, A contact info area, A driver note area based on previous drives, and tracking info accessible to employees.
* Measurable tasks: Create online classes and test section, create reservation system along with ability to modify reservations an who modified them, create driver and car assignment script for reservations, create permissions system for different account levels (student, employee, IT account,etc.), create automated password reset system, and create main GUI.

## 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 be built in a web-based environment with access to the cloud
* The system should run relatively fast, with the system being updated at login of student account

#### 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 popular PC and mobile platforms, such as Windows, Linux, iOS, and android.
* A database will be required for all accounts, reservations, and tracking info.

#### 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 will be distinguished by email address when they call to register.
* The system should inform of issues if there are any issues with the database (duplicate entries), security issues (such as attempted deletion of entries), or if tracking stops for accounts

#### 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?*

* System needs to be able to add and modify user accounts. IT will need full access with block permissions to all accounts
* The system will be cloud-based, so most updates will need to be scheduled for maintenance for the site to be down

#### 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?*

* User will log in with their email and password, and data must be sent to and from the server using an encrypted connection.
* For brute force hacking attempts, there should be a limit of attempted incorrect logins before the account is automatically blocked. IT will then have to be called to unblock the account
* There needs to be a “forgot password” button/link that allows users to reset their password using a verification method. Note that this does not unblock accounts.

### 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 should validate credentials, provide user class progress, list reservations made and who is driving for it, provide package info when purchasing packages, and allow employees to see DMV notifications

### 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 will be interacted with through a browser for users.
* Students will be the main account level for most users, there also needs to be an employee account level (for registration and reservations), and an IT account level (for account blocks and security)
* The interface must include: a class tracking area, student information, driver notes, reservation information, a driver and student photo, and a student special needs area

### 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?*

* Driving lessons are 2hrs long each. If a session is longer than 2 hrs, the reservation needs to take another lesson slot.
* The users must have access to a PC or mobile device, along with their login info to see their page. They can call to make reservations as well.

### 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?*

* Making the site compatible with all browsers may be difficult
* Time is the next constraint. Some tasks are delayed due to employee breaks

### 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 computer

Description automatically generated*