# 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?*

Our client is DriverPass. This client wishes to provide students with access to online practice exams and on-the-road training to better prepare them for driving 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?*

The system should allow our client to access data from anywhere whether online or offline, desktop or mobile.

The system should allow the client to download data and save it offline for use in Excel.

There should be a ‘master’ account made that can reset passwords of employees of our client or block users.

Actions from a user account of our client should be tracked on the data (reservations, cancellations, modifications)

Customers of our client should be able to make reservations for lessons. Lessons are 2 hours long and the date and time should be provided. Reservations should be made using customer accounts or calling/visiting the office to schedule one. The driver (Employee) and Car should also be tracked with a reservation.

Client currently has 10 cars and states, “Each car has a driver”.

Accounts should be Main account, IT officer account, and secretary. These should be able to modify data.

There are 3 Package options (Maybe with room for more) which would be spread across multiple sessions of 2 hours.

Packages should be able to be disabled.

Registration would include first name, last name, address, phone number, state, and their credit card number, expiration date, and security code. Along with pick-up and drop off information (Should be the same)

Should be connected to DMV to get updated rules, policies, etc.

Needs to run in the web possibly ‘over cloud’ for automatic backup and security.

### 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 fully completed system for DriverPass should enable students to access online practice exams and on-the-road training, allowing reservations for 2-hour lessons with specified dates and times, tracking driver and car information. It should support account management with main, IT officer, and secretary roles, offer three package options, handle user registrations with payment details, connect to the DMV for rule updates, and operate seamlessly online or offline, on desktop or mobile, with a master account for password management and data tracking for user actions. Additionally, the system should allow downloading data for offline use in Excel, could disable packages, and run on the web, potentially over the cloud, for automatic backup and enhanced security.

## 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?*

* It would need to run in browsers, and app, the speed of the application doesn’t really matter much, more so that it works consistently.

#### 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?*

* A database would be ideal for managing users and their registrations. The system would most likely run on a device that’s capable of being always online such as a Linux server.

#### 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?*

* Since a database would be used for the customers, each entry in the database would have a unique ID to provide information about them.

#### 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?*

Yes, again at the front-end it would be button clicks that result in queries to a database.

#### 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?*

* Of course, an email and password would be used to log in, backups of the database can be made daily to a local backup and to another cloud backup. Data would be encrypted before it’s sent to and from the server, if there’s a brute force attack on an individual user account, we could email the user account of suspicious activity from a IP address and we can disallow login for that email address for a given amount of time. If the user forgets their password, they can reset it and be sent an email to reset it.

### 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 allow users to make reservations for 2-hour driving lessons, specifying the date and time, and track reservations, cancellations, and modifications.

The system shall support different user roles, including main accounts, IT officer accounts, and secretary accounts, each with the ability to modify relevant data.

The system shall handle user registrations, collecting first name, last name, address, phone number, state, credit card number, expiration date, and security code, along with pick-up and drop-off information.

The system shall allow users to download data for offline use, particularly in Excel format.

The system shall run on the web, possibly over the cloud, for automatic backup and enhanced security.

### 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 would need to provide online test progress, student information, notes for the drivers, special needs, driver’s photo, and student’s photo.

### 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?*

* Since it’s an online application, it would need to interact with HTML, JS, and CSS to create a modern looking UI for the users.
* Reservation details are not provided and other such settings, payment options, contact information, reservation settings, themes, etc. are not shown.

### 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?*

* Technology-wise, this should be do-able, Budget since there would be cloud backups and potentially constant daily backups, it could be costly. Time depends but if everything goes as planned it should be doable within the time limit.

### 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 white grid with many lines

Description automatically generated with medium confidenceA graph with multiple colored squares

Description automatically generated with medium confidenceA graph with multiple colored lines

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