# 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 is DriverPass
* Our firm wishes to address the software needs of the client
* DriverPass wants to assist new drivers in passing their DMV exams

### 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?*

* DriverPass thinks there is a need for better driver training
* Provide online classes
* Provide practice tests
* Provide on-the-road training

### 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?*

* Able to access data from any computer or mobile device
* Security with login, password, rights and roles
* Security admin access for IT officer
* Secretary able to set appointments and details for any customer
* Tracking capability for changes to records in the system
* Owner of DriverPass able to print record activity report
* Customers able to create their own account, login and password
* Display information about driver lessons packages offered by DriverPass
* Customers able to make reservations for driving lessons, date, and time on their account
* Customers able to modify or cancel reservations while logged into their account
* Ability to track which customer is scheduled for which car, driver, and time slot
* Ability for owner to disable reservations for any or all driver lessons packages
* In customer account registration, request made for first name, last name, address, phone number, state, credit card number, card expiration date, and card security code
* Password recovery and change capability for customers
* Owner linked with DMV website to receive notifications on regulation changes
* Should be a web application run over the cloud
* Backup and security handled by third-party
* Interface should display student information, online test progress, driver notes, driver photo, student photo, and special needs
* Build separate page for driver notes, displaying lesson time, start and end hours, and driver comments
* Build page for student information input
* Build contact page

## 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 client has requested that the system run in a cloud environment and be accessible through both desktop and mobile devices. The system should update any time there is new user information added or a profile updated. The system should automatically back up at the end of each day. Currently, there are no specific performance requirements pertaining to the speed of the system.

#### 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 be able to run on Windows, mac OS, Unix, and mobile platforms, as the client has requested accessibility from virtually any device. The back end will require access to a customer information database and a means to perform system updates and maintenance.

#### 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?*

* *To distinguish between different users, we will implement a user profile system accessible with a login ID and password created by each user. For convenience and security’s sake, I recommend case-sensitive login IDs and passwords. Generic user input fields not used for identification should not be case-sensitive to make the system more user-friendly.*

#### 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 can be made to a user account by office personnel or the user without changing code. The system will run over the web through a cloud environment using cross-platform code, so platform updates should not be a problem. The IT admin will need root-level access to perform updates, maintenance, and minimal security functions. Most security will be handled by a third party.

#### 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?*

* A login ID and password created by the user will be needed to log into the system. To secure data transfer the IT admin will need to install an SSL/TLS certificate on the server side to utilize HTTPS. In the event of a brute force attack, the system should lock out the account after three failed login attempts and the IT admin will have to be contacted to unlock the account and assist with password reset. There will be options on the login screen for users to reset their login ID or password if they forget them. One or more forms of identification will be needed to change login ID’s or passwords (i.e., registered email access, security questions, PIN).

### 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 validate user credentials when logging in.
* The system shall track changes to records in the system.
* The system shall print record activity report.
* The system shall display information about driver lessons packages offered by DriverPass.
* The system shall allow customers to make reservations for driving lessons, date, and time on their account.
* The system shall allow customers to modify or cancel reservations while logged into their account.
* The system shall track which customer is scheduled for which car, driver, and time slot.
* The system shall allow the DriverPass owner to disable reservations for any or all driver lessons packages.
* The system shall, in customer account registration, request the user’s first name, last name, address, phone number, state, credit card number, card expiration date, and card security code.
* The system shall display student information, online test progress, driver notes, driver photo, student photo, and special needs.
* The system shall display separate page for driver notes, showing lesson time, start and end hours, and driver comments.
* The system shall take user account input.
* The system shall display DriverPass contact information.

### 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 client has a template that is to be used in creating the user interface. It needs to display customer information (first name, last name, address, city, state, zip code, phone number, email address, etc.), online test progress, diver notes, special needs, driver photo, and student photo. The user will need to be able to input or update their information, view and purchase DriverPass packages, make reservations to complete their program, view, modify, or cancel reservations, view their progress throughout a purchased program (package), view feedback from their driving instructor, and email DriverPass support. Perhaps a chat function could be suggested at a later time.

### 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?*

* There is no consideration for what language the users may speak and read. We are assuming all users will be fluent in English. The service area for packages including in-person, instructor-led driving lessons has not been specified. It may only be practical for driving lessons to be offered at a specific location, and this issue has not been addressed. The incorporation of DriverPass online lessons has been brought up, but there is no direction on how this is to be built into the system.

### 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 way it stands, it will be limited to customers fluent in English. In-person driving lessons will not be available to all online customers. Some employees are out on vacation. The client has not given us a timetable for when this must be completed, but due to limited personnel, we project it will take at least four months. I do not foresee any technical limitations, and the client has not set budget constraints.

### 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

Description automatically generated