# 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 driver pass
* The want to provide training to their customers to help them pass their driving written and practical 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?*

* Reduce the number of people who fail their driving tests by providing training
* Provide online practice written driving exams
* Provide online classes
* Schedule road practice with an instructor
* Data access from any computer or mobile device
* Assignable user roles and permissions
* Tracking of changes to reservations

### 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?*

* Website that allows customers to book, update, or cancel training in one of three packages
* Website allows site admins to disable packages
* Customer can reset their password
* Company will receive a call when a customer registers, and will receive first name, last name, address, phone number, state, and their credit card number, expiration date, security code, pickup location, and drop off location.
* System notifies admin when an update to DMV rules and testing standards occurs

## 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?*

* Web-based
* System should update anytime the DMV updates with new rules, policies, or sample questions

#### 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?*

* System should run on any system being web-based
* Admin should be able to access data from any platform or mobile device
* Database must be provided to store customer information

#### 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?*

* Users can be identified by a unique email used to signup, which can be case insensitive
* Users will be flagged for the user type: Customer or Admin
* Customer problems should be reported immediately
* Security and data backup problems should be reported, and passed to an outside source to handle: Driver Pass wants to focus on their business side and not technical issues

#### 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 will allow create, update, delete functions on users with no code changes.
* The system will allow updating specific modules to enable and disable with no code changes.
* System will be built using longterm support platforms, updates can be analyzed and applied if they will benefit the system.
* Admin will have full access to data and user accounts, allowing them to download data, update accounts, reset passwords, contact users.

#### 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?*

* All users will require a password, requiring lowercase, uppercase, number, and special character and a minimum length.
* System will have a wait time between login attempts and a maximum number of attempts before requiring the user to contact an admin. In the event of a brute force attack this will slow down the attack and give it only a limited number of guesses before locking the account.
* If the account is locked due to too many login attempts the user should be notified.
* If a user forgets their password, they should contact an admin to reset the password.

### 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 on log in.
* The system shall allow users to book reservations
* The system shall provide practice tests
* The system shall provide classes
* The system shall show the time, driver and car the customer is scheduled for
* The system shall provide 3 training packages
* The system shall provide administrative access
* The system shall notify administration when the DMV updates rules, policies, or sample questions
* The system shall be hosted on a cloud server

### 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 UI should show tests the user has taken and their status: Not taken, in progress, passed, or failed
* Driver notes will show lesson start and end times and any comments left by the driver
* Students and admin will need a form to input student information (name, address, email, etc)
* There should be a contact form for students to contact the company, and for admin to contact students.
* Customer users should be able to see test data, driving lesson data, update their account, sign up for packages, and take tests.
* Admin users should be able to navigate customers, update user accounts, add driver comments, and reset passwords.
* UI should be browser based and mobile friendly

### 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?*

* Payment methods have not been addressed
* If tests are taken on another site and data imported or if tests are built into the system has not been addressed
* Budget has not been stated
* Users are assumed to have internet access

### 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?*

* Cloud server, database support, and security choices will be limited by budget
  + Many cloud servers provide security options that may meet requirements at a lower cost than sourcing security elsewhere.
* The timeline for the project is about 4 months.

### 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 picture containing timeline

Description automatically generated