# 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: DriverPass
* Provider online classes and driver’s tests for driving students in the area

### 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?*

* Create a system with online classes and practice tests as well as online reservation resources to schedule driver’s training.
* There has been a large number of failed driver’s tests in their area. He hopes to help resolve this issue.
* They wish to provide better resources to new driver’s so they may have a better chance at passing their driver’s test.
  + They wish to have an online reservation system that can be modified and updated by the user as well as admin and the secretary.
  + They wish to have the customer be able to pick from multiple packages
  + They wish to offer practice tests and online classes as well as on-the-road driving practice

### 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?*

* Provide users with online practice tests and classes and be able to schedule in-person driving
* User should be able to modify and update appointments if needed
* Users should be able to have secure access to their information from multiple platforms
* Admins should be able to reset passwords/usernames if needed
* Admins should have access to the system from multiple devices at all times
* Different tiers of access for different types of users (example: admin, secretary, security, user)
* System should be able to track changes made and create a report of the changes and who made them
* Management need to be notified when a new appointment is made and who they made their appointment with (car, driver, etc)
* User should also be able to call and make reservations and still be able to access and make changes on their account if needed
* System should be user friendly and easy to understand
* Admin should have ability to disable packages if certain things are not available to the user
* System should be able to securely store customer data (name, address, phone, credit card number, etc)
* System should also be able to schedule a “pick up location” that the user picks.
* User should be able to reset password/username in the event of forgetting
* System should update information based on when the DMV gets updated information so all class information is up-to-date and accurate.
* Does not want to deal with backup and security. Would like the system to be cloud-based
* Would like “desktop” setup homepage showing test progress, driver’s notes, customer information, special needs, driver photo and student photo.
* Driver’s notes should show things like lesson time, start hour, end hour and comments from the driver
* Have a student input form when signing up that takes all of the student information. Should be able to be filled out by the user or by the secretary. Takes student information such as contact info, name, etc

## 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. Hosted on cloud
* System should run fast and efficient, processing input, updating system and providing necessary information in a timely manner
* System should be updated frequently to keep up with important information changes.

#### 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?*

* Should be able to function across multiple platforms, ideally on all major operating systems and mobile platforms
* System is connected to DMV database and updates as it updates
* System should store user information in a secure database

#### 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?*

* The system will distinguish between users using a secure access code (username and password) that is unique to that user. This can be updated and recovered by the user, secretary or admin if needed.
* Input should be case sensitive and offer special characters to increase security and uniqueness
* The system will store and create report of any changes to the system
* Admin will be notified if changes such as secure information, passwords/username, etc
* The system should notify the admin if there is any issue with access or if customer or others with access report an issue.

#### 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?*

* There will be different tiers of access. The owner will have full access with full ability to make changes as will the admin and security. The secretary will be able to schedule and see basic information on the user. The user will have access to only their own information and be able to make changes to it after accessing their account. They will only be able to make changes to their information, appointments, etc.
* IT admin should have full access
* The system updates as the DMV database updates. It also will update security regularly to make sure the system is up-to-date and secure
* The system should be able to be updated in the future if the owner wishes to add new features

#### 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?*

* Users will require a username and password to access the system that can be recovered and changed if needed
* The system should only allow so many attempts at access before locking the system
* Users should be able to prove who they are using a secure system and reset their password if needed (using secure email, questions, etc). This can be offered before all attempts are made and forced after

### 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 create a private account for each user and allow access to only that account using secure username and password
* The system shall give the user access to all their information, appointments, classes and content
* The system shall give the user access to the information of the tier they pay for
* The system shall provide up-to-date classes and practice tests
* The system shall allow the user to book appointments for in person lessons and tests
* The system shall store user information into a secure database
* The system shall allow the user to make changes as needed to scheduling and their information
* The system shall record and report all changes as they happen
* The system shall inform admin of errors and complaints
* The system shall give the secretary enough access to make changes to user account and appointments if needed
* The system shall allow the owner to disable packages if needed and add future features as needed
* The system shall pull information from the DMV database and remain up-to-date as needed
* The system shall have regular security updates to remain secure and efficient

### 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 user interface shall be laid out as discussed in the interview.
* It will be simple and easy to understand
* There will be different tiers of access from owner, admin, security, secretary and customer
  + Owner, admin and security should have full access
  + Secretary will be able to make changes to the schedule in simple customer information
  + Customer will have access to their information and be able to make changes to their information and schedule
* The system will be accessible across different interfaces such as mobile and browser.

### 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?*

* User has access to the internet
* User has access to a computer and/or mobile device
* DMV will allow access to their database
* DMV will accept tests and training from this company

### 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?*

* Five month timeline
* Budget has not been specified
* Project should be within the capabilities of the team

### 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.*

