# 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?*

* DrivePass wants to provide students with online training and tests.
* DrivePass also wants the students to be able to schedule in person driver training.
* DrivePass will provide students three different packages to choose from.
* DrivePass’s goal is to lower the number of failed drivers tests at the local DMV.

### 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?*

* Liam the owner of DriverPass has seen a lot of took note of many failed drivers tests at local DMV’s.
* Liam wants DrivePass to provide online training and practice tests to customers.
* Liam also wants to be able for customers or authorized users to be able to create, modify and cancel in person appointments.
* Liam talks about four different user profiles.
* Ian the IT for DrivePass wants the system to be cloud based with automated backups and security.
* Liam wants students or secretary to be able to edit students’ profile.
* Get updates from DMV using API connections.

### 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?*

* Student can login to profile, make, cancel, and modify appointments.
* Students who forget password should be able to automatically reset it online.
* Secretary should be able to make student profiles, make, cancel, and modify appointments.
* API connection to DMV that gives notifications of updates.
* Owner has full access over all accounts, can reset them if someone forgets their password, be able to block their access to accounts.
* Packages can be enabled and disabled.
* Data and reports are available offline.
* System must log who made a reservation, who canceled it, who modified it last.
* System tracks which user is matched up with a certain driver, time, and car.
* User Interface should show “Online test progress”, “Driver notes”, “Student Information”, “Student photo”, “Driver photo”, and “Special needs”.
* “Online test progress” shows test name, time taken, score, and status. Status could be not taken, in progress, failed, or passed.
* “Driver notes” should show comments left by driver, and times for lessons.
* “Student information” will include first name, last name, address, phone number, and email.
* IT should have full access to system except for being able to block users.
* There should be a page for contacting DrivePass.

## 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 application preferably over the cloud.
* App should meet expectations for a modern Internet Application.
* System should alert to DMV update.

#### 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?*

* Back-end needs system database for user information.
* The system should support major web browser such as Safari, Google Chrome, and Microsoft edge.
* The system should support mobile web browser such as Safari, Google Chrome, and Samsung Internet.

#### 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?*

* System should support different access levels among users.
* System should recognize input case-sensitivity.
* System should notify admin of an issue in less than 2 minutes
* System should inform admin of DMV updates in less than 24 hours.
* System should log changes made to user account and by who.

#### 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?*

* IT admin needs to be able to maintain and modify system.
* Updates should be able to be applied with less than 30 minutes of downtime.
* User needs to be able to make appointment, cancel, and modify appointments online in less than 10 minutes.
* System will require a developer or systems analyst to alter.

#### 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?*

* Password reset should be automated using security questions and users personal email.
* Username will be case sensitive and allow for limited special characters.
* User passwords will be case sensitive and allow for limited special characters.
* User accounts should be locked after maximum allowed tries set by IT admin.
* Connections should use secure connection methods like TLS and a cipher suite.

### 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 be able to reset passwords online.
* The system shall track change to making, canceling, and modify appointments.
* The system shall be able to disable packages.
* The system shall be able to register new users.
* The system shall be able to block users.
* The system shall be able to distinguish between users and level of access.
* The system shall receive updates from the DMV.
* The system shall be web based.
* The system shall track what user is matched with a certain driver, time, and car.
* The system shall allow users to make, cancel, and modify appointments.
* The system shall allow for data downloads,

### 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.)?*

* User interface for students should display “Online test progress”, “Information(first name. last name, address, city, state, zip, phone number, and email)”, “Drivers notes”, “Special needs”, “Driver photo”, and “Student photo”. As well as to allow users to make, cancel, and modify appointments. Student should be able to contact DrivePass and fill in information. Student should also be able to access package materials they have paid for and be able to reset password. Students should be able to buy packages from DrivePass
* Owner should have unrestricted access to system able to make perform any function any other user can.
* IT admin needs to be able to maintain and modify the system as well as able to reset passwords and block accounts.
* Secretary should have access student information and schedules. The secretary should be able to alter both the information of students and their appointment. Secretary should also be able to take payments for package student wishes to purchase as well as add it to their account.

### 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?*

* Users have access to the internet with sufficient bandwidth.
* Users have working desktops/laptops, or Smartphones.
* The DMV has a API.
* The user has a personal email.

### 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?*

* 17 weeks to complete the project.
* The compatibility of web browsers and mobile browsers.
* Capability of a web server.
* The cost of a web server or cloud server.
* DMV intergrations.

### 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*