# 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 DriverPass sees the need for better driver training because a lot of people fail their driving test.
* Online classes
* Practice tests
* Schedule on-the-road training
* Customers receive feedback from instructors after training.

### 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 customer chooses between 3 different packages (certain inline access based on packages)
  + Show how many hours customer has left.
* Scheduling on-the-road training
  + The customer can schedule, change, or cancel.
  + The secretary can schedule, change, or cancel for customer.
* Being able to access data from anywhere.
  + Online, mobile, and offline.
  + Downloading data to work offline.
* Different access for different people
  + Owner
    - Full access
    - Disable certain packages.
  + IT Officer
    - Maintenance
    - Modify the system.
  + Secretary
    - Schedule appointments for customers.
    - Create account for customers.
* The accounts for the customers
  + The customer or the secretary can create new accounts.
  + Needs first name, last name, address, phone number, state, credit card number, expiration date, security code, pick up and drop off locations.
  + Show student’s test progression.
    - Show the test name
    - Show the time it took to take test.
    - Show the final test score
    - Show test status (not taken, in progress, failed, or passed)
  + Show driving instructor notes.
  + Student ID Photo
  + Driver ID Photo
  + Any Special Needs Required
* Tracking
  + List of who changed the information/ activity report.
  + Tracking the drivers
    - Which student has which driver?
* Updated information from the DMV
  + Is connected to DMV to have updated and current information.
  + Have them notified of any updates that occur.

### 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 system needs to be flexible.
* Be downloadable for offline use.
* Updates with the reservations and cancelled ones
* Run on the cloud.
* Shows student test progression.
* Input where the customer/secretary fill in their general information.
* Page to contact the client.
* Page to contact the customer.

## 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?*

* Since they are wanting the application to be accessed online this will need to run in a web-based environment.
* Current information is required with the application so they can give the students accurate information, this requires them to be connected to the DMV so they can get updated information as soon as it changes.
* They are wanting the students to see their test score information and progress so as soon as they take a test the application should update with their latest test information and scores.

#### 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 platform should be independent. They are wanting a web/cloud-based system so all they will need is a web browser.
* They are wanting the admins to be able to access the data within the system with any platform if there is online access.
* They would prefer that the system run over the cloud, so the system needs hosted servers to contain the application.
* This system is going to need at least one, if not more than one, database. These databases must contain information for the users, drivers, and the appointments.

#### 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 different users will be given different levels of authorization. Those levels will determine how they are able to interact with the system. These levels will be determined by the admin, who has control overall.
* The admin should be informed whenever a change is made to a record in the system. The information given to the admin would include what was change and what user made the change.

#### 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?*

* Since the system is being build in a cloud environment, it should be able to adapt to any platform updated easily.
* There should only be on admin that has full access to all of the system. This admin should have access to reset different user’s passwords when they are forgotten. The admin should also be able to determine the access that certain user have to the system and block user completely for if they leave the company.

#### 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?*

* For a user to log in they would need a username that was either created by the admin when the employees were hired or when the students signed up for classes.
* If an account were to be hacked by using “brute force” then the account being hacked will be locked out from the system and will no be allowed to be accessed until the admin opened it back up and user information will need to be change for security purposes.
* If a user ended up forgetting their password, they would need to inform the admin of the forgotten password by email or other means. If permission was given, then the admin would allow for them to reset and create a new 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 will need to have a log that contains all of the driver reservations that have been changed or cancelled.
* The students should be able to log into their pre-made account to make driver reservations, take online test, and receive driver feedback.
* The Secretary should be able to log into their pre-made account and schedule or change driver reservations the students have called in about.
* The admin should be able to long into their account and download certain reports and other information for work to continue offline.

### 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.)?*

* There are four different users of the new system: the students, the secretary, IT, and the admin.
* All users will need any device that is able to access the internet: computer, smartphone, tablet, etc.
* The students will need to be able to interact with the system to schedule or change appointments. They will need to be able to have access to the online test and the progress that they have made on those tests. They will also need to be able to see any drivers’ feedback.
* The secretary will need to be acle to interact with the system to schedule or change appointments for students that call over the phone.
* IT will need to be able to access the system to perform any maintenance or fix any problems that may occur.
* The admin needs to able to interact with the system to add new users, change user access, change user information, and block certain users from accessing the system.

### 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?*

* All users have access to a computer or internet to interact with the system.
* All users have access to a phone to call the company to set appointments.
* There is already a phone number for students to call to make an appointment or create an account for drivers ed.
* From the sketch shown, this system will only consist of a single web page, there was nothing else that stated there would be more than one web page.

### 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?*

* Since the system will be running via the cloud, the system administrators will not have direct access to the servers for the system.
* Since there will be certain students that do not have access to the internet and modern technology, they will need to rely on the secretary to make all appointments for them. This would cause the secretaries time to be limited and make it more difficult for people to get a hold of the company via phone.

### Gantt Chart

Chart, timeline

Description automatically generated*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.*