# 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?*

* Purpose: provide drivers’ test classes online to help individuals who are trying to get their driver’s license.
* Client: DriverPass
* DriverPass wants their system to provide online driver’s test practice/classes and provide on the road training to users who are in need of driving 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 system should provide online training to individuals taking a driver’s test.
* There is a lack of training for individuals when it comes to the driver’s test at their local DMV.
* System should allow access to data from anywhere to allow for modification and updating of data. Also allows for download reports to Excel
* Needs to have security features such as user access and tracking of user data and system changes.

### 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?*

* When completed, the system should:
  + Needs to allow for users to make reservations for driving lessons. The user should be able to choose a day and time and reserve it for lessons. This also needs to be able to track which user is matched with which driver and car.
  + Allows for three packages of lessons the user can choose from and allow for disabling of packages if the client does not want any more reservations.
  + System should connect with DMV in real time to stay updated with new rules, policies, or sample questions. This should create a notification to the client.
  + System user interface should look like the sketch that the client provided.
* Measurable tasks:
  + Begin on Feb 11
  + Building use case diagrams and activity diagrams – 8 days (Feb 17)
  + Toni and Clark will create user interface designs – 9 days (Feb 18)
  + John will work on the class diagram beginning March 1st – 9 days (March 10)
  + Meet with customer by March 11th and discuss project.

## 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?*

* Should be a web-based and cloud-based application so that the system backup and security is managed by a third party
* System needs to run smoothly and quickly
* The system should be updated regularly whenever any new rules, policies, or sample questions are provided from the DMV.

#### 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 run on windows, ios, and android.
* The system will require a database to hold client information, scheduling information, and practice tools such as study materials.

#### 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?*

* Each user should have a username and password, this will be case-sensitive. The user should be able to create the username and password when first registering.
* The system should inform the admin if there are any possible security breaches or if there are any issues in the system

#### 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 will be necessary to have a developer that can modify code in order to add or remove modules as needed
* To adapt to platform updates, a developer or system analyst will need to be involved to change the code of the system
* The IT admin should have permissions to maintain and modify the system however necessary

#### 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 user must have a username, email, and password to login and will require two-factor authentication
* To secure the connection between the client and server, we can use cryptography or SSL. SSL will allow for authentication of clients and servers by encrypting and decrypting data.
* If there is a brute force hacking attempt, the account should be locked, and an email should be sent to the user to notify them that their password needs to be changed.
* If the user forgets their password, they should follow the on-screen prompts to reset the password using two-step verification codes.

### 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 lock the user account when notified of a hacking attempt
* The system shall allow the user to reset password using two-step verification
* The system shall create reports that can be downloaded by the admin
* The system shall give specific permissions for each user that are set by the admin
* The system shall allow the admin to reset and delete accounts
* The system shall track reservation information and create a report for this information
* The system shall allow users to make reservations by day and time
* The system shall identify the driver, car, and customer scheduled together
* The system shall allow users to cancel and modify appointments
* The system shall allow admins to customize packages
* The system shall allow admins to disable packages
* The system shall provide contact information to the user if they need assistance

### 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 should show the user online test progress including completed tests, user information, driver notes, special needs, driver photo, and student photo.
* This interface is designed specifically for customers
* The customer should:
  + View past test results and current test progress. This includes test name, time taken, score, and status of completion (not taken, in progress, failed, passed)
  + View driver notes including lesson time, start and end time, and driver comments
  + Have access to an input form that can be filled out which includes student information such as name, address, phone, email, etc
  + Have access to a contact page which shows the contact information of the company
  + Have access to register for driver lessons and modify or cancel appointments
  + View their driver’s photo
* The user will interact with the interface through a web 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?*

* The budget was not provided to us in the interview. I would assume that everything the client told us would be included in their budget. If we need to add any additional hardware or programs, we should speak to the client to make sure this is allowed in the budget.
* I must assume that users have access to a web browser that can easily access and run 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?*

* Since we were not given a budget, we must try to keep the project within the limits of specifications that the client gave us to prevent from adding any extra expenses.
* Since the client wants the system completed within 5 months, it will be necessary to stay on track and keep an agile approach to ensure that the project is completed in time.

### 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.*

Timeline

Description automatically generated