# 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 purpose of this project is to enhance driver training to prepare for driving tests with the DMV. Liam (DriverPass) is the client he wants to allow his users to take online course with practice tests, he also wants to allow users to have the option to opt in for on the road training if they want to.

### 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?*

* DriverPass wants the system to allow him to access data online and offline from anywhere, specifically he wants to be able to download reports so he can work on them with Excel. Liam is also wanting to be able to know who is making/canceling/modifying reservations. One problem is making it user friendly while making a reservation. The system needs to be able to be disabled by DriverPass if there are too many clients, user information needs to be maintained in reports that can be worked on in Excel, the system also needs to be connected to the DMV so that the information is accurate to what the DMV is looking for when doing driving tests. DriverPass would also like the system to operate through a cloud on the web.

### 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 the system is completed it should be able to compute lessons for the learner with relevant practice questions. It should also allow for students to opt for on the road driving practice including who made the reservation, canceled the reservation, or modified the reservation, as well as who the driver assigned to the reservation is so the company can keep up with who is assigned to who making things safer for both the client and the driver. The development needs to keep these needs in mind and maintain an idea of what the webpage should look like so the company is getting what they want. The team should maintain the interface that is desired.

## 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 cloud environment
* The system should run with a load time of a couple seconds
* System updates are based on the DMV and should be updated roughly every month or more if there are more updates from the DMV, a notification will be sent every time the DMV has a new update so the company knows when an update will occur

#### 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 is web based so it should run on browsers including mobile browsers, i.e. chrome, safari, edge, etc
* The back end would need a web server and a database for storage

#### 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 will have their own login
  + Passwords should be case-sensitive for extra security
* The system should be completing a scan at each login to verify user and report back to admin if a problem arises
  + Multi-factor authentication could be utilized to minimize problems

#### 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?*

* Changes to the user can be made without changing the code, but would need to be done by the backend team
* Since the system is web-based there should not be any issues with updates, but this will come down to the development team and the code to make sure it is functional in each environment they want it to be functional in
* The IT admin needs access to the server, database, and updates provided by the DMV

#### 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 login they will need a username and password (case-sensitive)
* To secure the connection between client and server the company could utilize multi-factor authentication
* If there is a “brute force” hacking attempt the user would be locked out and would have to contact the Help Desk to be allowed access
* There should be a forgot password option that has the client answer security questions to get an email link to reset 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 when logging in
* The system shall allow for password resets if the client can answer their security questions
* The system shall allow a set number of attempts to login before locking the client out
* The system shall notify the admin when a “brute force” hacking attempt is made
* The system shall create user accounts
* The system shall show packages to the client
* The system shall allow the admin to remove or add packages
* The system shall show which driver is connected with which client (including date, time, car, etc)
* The system shall receive updates from the DMV for system updates
* The system shall display client information
* The system shall give access to the tools provided in designated package
* The system shall provide feedback to the client from their lesson including how it went, when it was, how long it was, and the instructors notes

### 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.)?*

* For clients
  + Login page
  + Home page
  + Available packages
    - Including what is included in each package
  + Package selected
  + Scheduled drive times
    - Including who the client is scheduled with
  + On road learning history
    - Client should be able to refer back to previous lessons to review the instructors notes
  + Access to online learning tools
* For Admin
  + Client information
  + Client package selections
  + Scheduled drive times
    - Which client is connected with which driver
  + Add/remove packages

### 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 users should be able to access their account from anywhere at any time
* Admins understand how the technology functions
* Users understand how to navigate the website

### 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?*

* Resources include 10 cars which need to be cleaned and given proper maintance
* Only 10 clients can have on road practice at a time due to the number of cars
* The development team needs to stay within the budget provided by DriverPass
* If there is a connection error the system could go down due to it being web-based

### 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 screen shot of a project

AI-generated content may be incorrect.