# 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 is DriverPass company. They want a new system that will help them to take advantage of the void in the market when it comes to training students for the driving test at their local department of motor vehicles (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?*

* The owner of DriverPass company, Liam, noticed that there is a need for better driver training since a lot of people fail their driving tests at the DMV. He started the company to provide that kind of training. There will be online classes, practice tests, and on-the-road training available.

### 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 should be accessible online and offline
* The system should be cloud-based
* The user should be able to create an account by filling out registration form
* The user should be able to purchase any of the packages
* The user should be able to take online classes and practice tests
* The user should be able to schedule driving lessons
* The main user (the owner) should have full rights permissions
* The system should have activity and transactions reports ready for export

## 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?*

* The system should be web-based
* The system should be able to support a high volume of students accessing the functionality at the same time
* A response time for any pre-defined operation should be no longer than 5 seconds

#### 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 be cloud-based to avoid hurdles with back-ups and security
* The system should have a database to store information
* The users should still be able to access information offline, but not modify it

#### 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 should implement an authentication API for added security and to distinguish between users
* The system should have case-sensitive input and password constraints for customer’s security

#### 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?*

* The system should allow to make changes to users without changing code
* Users within the system will be assigned different user roles to manage permissions. IT admin will have access to manage customer users

#### 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?*

* Cloud-based solution will handle the secure connection of the data exchange between the client and the server
* Authentication API will handle the user account security
* In the case of a brute force attempt, the account will get locked after 5 unsuccessful attempts to log in
* If the user forgets their password, they will have the option to change it by going through MFA process

### 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 user to register a new account online
* The system shall allow user to modify their account info online
* The system shall allow user to create, modify, and cancel appointments
* The system shall track user activities and produce downloadable reports
* The system shall track scheduling
* The system shall allow student and instructor users to update schedule
* The system shall have password reset capability
* The system shall have an established connection with the DMV website and notify admins whenever there are updates
* The system shall have online classes and practice tests for user to take
* The system shall have an interactive feedback section for instructors to post their comments to students after lessons
* The system shall have a progress bar for students that will record their test information:  
  Test name, time taken, score, status [Not Taken, In Progress, Failed, Passed]
* The system shall have admin role with following permissions
  + Reset passwords for users
  + Block/unblock user accounts
  + Enable/disable packages
  + Create, modify, delete packages (post-MVP)
* The system shall have packages for the student to choose from:
  + Pack #1: Six hours in a car with a trainer
  + Pack #2: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies
  + Pack #3: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.

### 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 should adapt to the screen size and be accessible from desktop and mobile devices
* Student UI should contain screens to view and purchase packages, access online classes and tests, their instructor’s contact information, the schedule of driving lessons and ability to reserve a time slot, instructor’s notes section, the progress bar for their tests, and the customer support contact information.
* Admin UI should contain the capability to view/modify/block/unblock student and instructor accounts, enable/disable packages, export activity reports.
* Instructor UI should contain a class schedule and ability to modify it, student’s contact info, section to leave notes.

### 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 system will be accessible 24/7
* The DMV connection will be keeping the system up to date on all the guidelines
* Product and Development teams will be able to complete their respective tasks on schedule

### 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?*

* The MVP system is scheduled to be released on May 10th, three and a half months after beginning of the project
* Due to time constraints for the initial release, we will be only able to support one browser, Google Chrome. Support for more browsers can be added in the upcoming versions
* The client expressed interest in creating/modifying/deleting packages from the UI, without changing the code. We don’t have the resources to implement that functionality right away, therefore we settled on the ability for admin user to enable/disable packages

### 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