# 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?*

* Our client is DriverPass, a company that provides teaching services that prepares students obtaining a Drivers License. Driver Pass wants the system to do the following:
  + Provide online training for students to pass the writing test.
  + Properly schedule students for driving lessons.
  + Be accessible from any computer, to download reports.
  + Assign Users with specific roles and permissions.
  + Reservation tracking.

### 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 has noticed that many people fail their driver’s exam and would like to provide better training to offer a better service that will help students pass the exams.
* System should allow data access from anywhere, including downloads of reports.
* Modifications to data can only occur online so that there is no duplicate data
* Needs to have security features, as well as tracking of changes made by users.
* System in place that allows users to call and schedule appointments, as well as book appointments online.
* Flexible system where modules can be added or removed as needed.
* Keep track of billing information.
* System must connect to the DMV to stay up to date with changes in policies.
* Cloud system so that there is less upkeep for DriverPay.

### 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 Objective if the systems are to:
  + Automate scheduling
  + Track users’ statuses.
  + Track drivers and cars used for driving lessons.
  + Provide Owner with relevant access and information
  + Provide a system to students where they can track progress
  + Limit data to users with appropriate access.
* The goals are achieved if we are able to provide the following functionality:
  + Scheduling services for driving lesson.
  + Online Classes offering both material and quizzes.
  + Tracking ability where all operations made to the system are logged.
  + Flexibility offering users the ability to register for their courses either online or through the phone.
  + Data security allowing access to allowed users.

## 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 able to support 20 simultaneous users.
* The mean time to view a webpage over 56kbs modem connection shall not exceed 2 seconds.
* The mean time to download and view whitepaper PDF format for a 56Kbps modem shall not exceed 3 seconds.
* System should operate over the cloud so the website will be web based.

#### 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 Linux.
* The system shall use the cloud to manage security.
* The system shall use the cloud to manage the database.
* The mobile browser shall adapt to the user interface.

#### 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?*

* Cookies within sessions shall be able to identify different users.
* Each user shall be able to create a unique username and password.
* The system shall have multi-factor authentication to improve security.
* The system shall report any issues to the admin immediately.

#### 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?*

* Web app shall be continually updated.
* IT admin shall always have access to the database and server in order to make necessary changes.
* The system shall allow changes to be made to users and allow for the removal of 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?*

* The system shall provide password protected access to web pages that are to be viewed only by employees.
* Transaction data must be transmitting in encrypted form.
* Username and password shall be required for log in.
* System should disable account after a set number of failed attempts.
* User shall be prompted to enter their email address to have a reset link sent to their email.

### 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 users’ credentials when logging into the system.
* The system shall verify user using multifactor authentication.
* The system shall schedule and track appointments.
* The system shall become disabled after a set number of failed attempts at login.
* The system shall provide practice exams.
* The system shall provide the information of the driver the customer is working with.
* The system shall be fast and efficient.
* They system shall provide custom access based on the user and their privileges.
* The system shall supply information on the tests and work the customer has completed.

### 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 interface shall allow the IT admin to make changes and update the system as needed.
* The interface shall provide the customer with the option to purchase packages of their liking.
* The interface shall allow users to access the materials through mobile phone, PC, or any other device.
* The interface shall be web based.
* The interface shall allow customers to make appointments both online or in person.

### 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?*

* Most users will have emails, and devices to access the course content.
* No budget provided, so the system shall be built as desired.

### 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?*

* System must be compatible with all browsers.
* We have a set time limit to complete the project.

### 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.*

See Below.

