# CS 255 Business Requirements Document Template

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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?*

* This project is for a new client, DriverPass. The purpose of the project is to provide resources and training to student drivers in order to help them pass their driving tests. as well as to set up training sessions with drivers in order to help students pass their driving tests.
* The client wants to offer online classes and practices to driving students.
* The client wants to provide on-the-road training that can be scheduled online, by phone, or in person.

### 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 will run online through the cloud.
* The system will allow users to access training resources they have purchased online, as well as schedule on the road training.
* The system will recognize different roles such as users, employees, IT, and the boss., authorizing them to access and modify data or performs necessary functions according to their roles.
* The system will be notified of DMV updates so that the curriculum can be updated if necessary.

### 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 will provide system administrators (IT) with the following functions:
  + Maintain and modify all pages
  + Access or reset all accounts
  + Block access to accounts
* The system will provide employees with the following functions:
  + Schedule, modify, or cancel a training session for anyone
  + View or print training records
  + Access a page containing student information
* In addition to all functions provided to employees, the system will provide the boss with the following functions:
  + Block packages
  + Review online classes, practice tests, and resources
* The system will provide users with the following functions:
  + Access pages such as a home page, input form, and company contact information.
  + Purchase a package
  + Access purchased training resources
  + Schedule, modify or cancel their own training sessions
  + Register for an account
  + Change or reset password

## 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 accessible online through any web-browser.
* The system should be updated whenever the DMV updates rules, policies, or sample questions.
* The system should not take longer than 5 seconds to load a page.

#### 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 a cloud-based Linux server.
* The system should contain a database or file repository for the content used in the online classes and practice tests.
* The system should store user information in a database.

#### 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?*

* Users should be able to sign in using their email address and a password that they created.
* All passwords and input should be case-sensitive.
* The system should offer an activity report to track who made, cancelled, or modified an appointment.
* The system should track which user is matched with which driver and car at what time.
* The owner and administrator should be notified of any updates from the DMV.

#### 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?*

* Users should be able to modify their information using an input form.
* The system will be updated to keep up with DMV standards whenever the DMV has new rules, policies, or sample questions.
* An owner or administrator should be able to add, remove, or disable users, including employees (secretaries).
* An IT administrator should monitor patches and updates to databases or operating systems to ensure the system can withstand them. If there is a service pack, the system should be retested.
* IT administrators should be able to access all accounts to modify information or reset passwords if 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?*

* Users log in to the system using their email address and password.
* More than 3 incorrect attempts to log in with a given email address should temporarily disable the account and notify the account owner via email.
* Users should be able to reset their password automatically using a link sent to their email address.
* Passwords should be encrypted.
* The system should use HTTPS to ensure a clients have a secure connection.

### 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 that the password entered by a user matches their email address.
* The system shall display the training packages available for purchase.
* The system shall allow a customer to schedule a 2 hour training session at a specified date and time.
* The system shall allow customers to view their student information, online test progress, and notes from their on-the-road training.
* The system shall allow a secretary to register customers and enter student information.
* The system shall allow customers to modify their information
* The system shall allow the owner to disable training packages.
* The system shall allow the owner to disable users.

### 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 should acknowledge user input with a loading icon while pages are loading.
* The interface should display information as specified by the client and allow for user input to access different pages.
* The interface should be adaptable to different devices.

### 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?*

* I assume each time slot for on-the-road training has a limited number of cars and drivers available.
* I assume secretaries, IT administrators and the owner are the only employees that will interact with the system.
* I assume that users will be registered using their email address and will be emailed a link to create a password for their account.
* I assume users have access to the internet.

### 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?*

* Data cannot be modified offline.
* Package options cannot be changed without developer assistance.
* The cost of the system will need to meet the client’s budget requirements.
* The client does not have the resources to deal with backup and security on their own.

### 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.*

