# CS 255 Business Requirements Document

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.
* DriverPass wants a web-based application.
* This application should be able to allow students to create an account and register for a training plan.
* Training plans include on-the-road and online training at different price levels.
* Application should be able to keep up with DMV updates to driving tests.
* Employees should have access to relevant files and information with no more authority than is needed to do their jobs.

### 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 be able to give access to students to sign up for online training and on-the-road training for driving tests.
* The system should be accessible both online and offline for higher level individuals in the business.
* Users should be set with an authority level no greater than what is needed for the task.
* Students should be able to make reservations for on-the-road training.
* The highest level of authority should be able to remove access to a package level or add packages to the list as needed.
* System should be updated by the DMV in real time as updates and changes are made to tests and requirements.
* The system should be web-based to allow access to all employees and students at any given time.
* The system should be based on a cloud platform to ease the burden of maintenance and upkeep.
* The system should have a page for contacting employees regarding changes or information needs.
* The system should also allow employees to contact students in regard to changes or information needs.

### 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?*

* System should be able to be accessed both online and offline in order to access downloaded information for processing.
* System should have user authentication at differing levels to allow for password reset and to ensure security.
* Higher levels of authority should be able to track any changes in student packages, reservations, or information changes, showing who made the change.
* The system should show which driver is assigned to each student.
* Students should be able to select between three different package levels for training.
* The interface should show relevant information for the student. Including online testing progress, personal information (Address, phone number, email, etc.), driver assigned to student, and driver notes.

## 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?*

* Must operate on most if not all web browsers.
* System should be updated whenever a change is made.

#### 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?*

* Must operate on all operating systems.
* Database should be used to store all user and account data.

#### 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?*

* Students can only access their discussions, assignments, and grades.
* Students will choose a unique username to distinguish their data from others.
* Usernames will be case sensitive.

#### 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?*

* Must be able to expand to new client or user requirements.
* Users and admin should have access to modify personal information.
* Admin should have full access to entire system functions.

#### 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?*

* Only instructors can access assignments for grading.
* Users will need a password to access their account.
* Administrator has access to block, modify, or reset account access.

### 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 allow instructors to view student’s activity.
* The system shall allow students to access their courses and materials.
* The system shall allow students to track their individual grades.
* The system shall allow instructors to post announcements for students.
* The system shall allow reminders to be sent to students about assignment deadlines.

### 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 will be cloud based.
* The interface will display testing progress for students.
* The interface will show information for the user and their assigned instructor (if applicable).
* The interface will show comments from the instructor regarding the user’s progress.
* The interface will include an information form for the user to input personal information as well as a contact link for the company.

### 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 client will be available for clarification.
* All resources will be readily available.

### 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?*

* Limited formats for interface.
* Must be able to withstand a large volume of traffic.

### 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.*

Chart, waterfall chart

Description automatically generated