# CS 255 Business Requirements Document Template

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### 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 create an interface in the form of a website that helps future drivers to be able to take online classes, practice tests, and schedule on-the road-training. The main aim here is to help people from failing their driving tests by providing better training.
* The client here is DriverPass, and Liam is the owner of it.
* The client wants us to build a system that allows their customers to enroll in an online class, practice test, and schedule on-the-road training.

### 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 its system to fix many people from failing their driving tests by providing better training that includes online practice exams, classes, and the ability to book on-the-road training through the system.
* The client wants a system where they can access data from anywhere online.
* The client wants the system to have specific access to employees based on their roles and rights.
* The client wants the system to track the activity report of their customers.
* The client wants three different packages listed on their website and can disable the packages.

### 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?*

* Upon the completion of the system, a fully functional website must be delivered which allows customers to take a practice test and online class.
* The system must allow the customer to book, modify, and cancel on-the road-training.
* The system should also allow certain access to certain employees to make changes if needed or to further improve the system.
* To build the system, we should use object models, process models, and UML diagrams to help visualize the system.
* The decision must be made on the operating platform and the programming languages that will be used to create a website.

## 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 environment for the system will be web-based in the form of the website which will use the cloud for storing and managing data.
* The system will be fast as it needs to allow multiple users to access the website at the same time that will have requests which will go back and forth between the servers.
* The system should be updated at any point in time depending on the new features the client will request, guidelines that DMV will update, and also to remove any bugs.

#### 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 Windows. It should be able to run on any browser like Google Chrome, or Microsoft Edge. The website should be able to be accessed through a mobile device as well.
* The system will use the cloud to store and manage data as well as security. This will be required for the back-end.

#### 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 has to make an account first which will provide a unique username and password. The user will use this username and password to access into website. Y This is how different users will be distinguished from each other.
* Yes, the inputs will be case-sensitive and for extra security purposes, two-factor authentication would be used.
* The system will notify the admin when the user exceeds the limited number of times, they can input incorrectly. The system will notify the admin immediately if there is any problem related to the system itself like bugs, glitches, or server issues.

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing the code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Yes, the system will allow us to make modifications without changing the code.
* The system will adapt to platform updates slowly depending on the requested features. Every time the new features are added the platform updates will take place.
* IT admin will have full access to the system. IT admin can make any required changes like removing user accounts, verifying user accounts, adding new employees' records in the system as well as removing old employees' accounts.

#### 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 user will need a username and password to log in. It will be followed by two-factor authentication for extra security purposes.
* Cloud computing will be used to secure the data exchange between client and server.
* The system will automatically disable the account if there are more than 3 incorrect attempts to log in. The admin will be notified immediately. If the user forgets their password, the system will ask the user for their email address where a password reset line will be sent.

### 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 verify the user credentials when logging in.
* The system shall offer the three different driving packages the clients want their students to see.
* The system shall provide the practice test and class and show their progress.
* The system shall book the reservations made by the students.
* The system shall show the driver the students are paired with.
* The system shall allow the client to disable packages if needed.
* The system shall show the completed exam and work by the students.
* The system shall allow a user to update their mailing address and reset their password.
* The system shall custom access based on the type of user (admin or student).

### 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 needs of the interface are devices like laptops, computers, and mobile devices with an internet connection.
* The different users for this interface are the admin and developers. They both should be able to update the system when needed.
* Users will use devices with an internet connection to make reservations for driving appointments and take online classes and exams.

### 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 design addressed everything the client requested from making student accounts, providing them login credentials, offering them three different packages, practice tests, and online classes, able to track the progress, and providing the admin with special privileges.
* The first assumption is that there is easy access to all of this technology.
* The second assumption is that the project will be within the deadline date.
* The budget is not mentioned so there is the assumption that this project will be done within the budget.

### 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 first limitation will be always the technology, devices, and internet.
* The second limitation is the time. As of now, the five-month time frame provided is not enough.
* The third limitation is the budget as it is not mentioned.
* The DMV guidelines are always a limitation as they can change a lot.

### 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.*

