# 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?*

* Company: DriverPass
* DriverPass believes there is a deficiency in current training available to customers for DMV driver testing requirements.
* The purpose of the system is to provide DriverPass customers with an online interface that allows customers to schedule training courses, take practice tests, access training materials, and track their progress for the DMV requirements.

### 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?*

* DriveerPass wants to deliver training for customers to better prepare them for taking tests at the DMV. They will consist of driving training, online classes and practice tests to help customers pass DMV requirements.
* DriverPass needs to support multiple users/administrators within their database.
* DriverPass needs a reservation interface with multiple courses dates and times
* DriverPass needs to have a working database of available materials that conform to current DMV rules and regulations.
* DriverPass believes there is a deficiency with existing training for DMV testing requirements.
* Components Necessary:  
  User interface. Users will have ability to log into system, track progress, complete reading, schedule driver training, and take practice tests.

Administrator interface. Administrators will be able to input customer information, create training availability schedule, and update DMV requirements.

In person. Personal driver training will be available as will pick-up drop-off scheduling for training.

### 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?*

* DriverPass should be accessible online using any device.
* DriverPass should allow different access for different user types.
* DriverPass should display tables for driver notes
* DriverPass should display driver photo
* DriverPass should display table of completed courses, tests, and driving time
* DriverPass should create tables using storage methods
* DriverPsss should be able to input information and store in table

## 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?*

* DriverPass shall be available online as a web-based environment.
* DriverPass shall be used by multiple users at once, and should be low-latency.
* DriverPass shall be updated regularly. Users will update their personal information, and new users will begin using system likely daily.
* DriverPass shall stay updated to current DMV requirements and regulations.

#### 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?*

* DriverPass shall operate on multiple platforms.
* DriverPass shall have Web Server software installed. (Apache 2, NginX, Windows Server)
* DriverPass shall store training materials in a database.
* DriverPass shall store instructor information in a database.
* DriverPass shall store driver information in a database.
* DriverPass shall store practice tests 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?*

* DriverPass shall have multiple user types/ (Administrators, Instructors, Clients)
* DriverPass shall be case-sensitive.
* DriverPass shall problem check for scheduling conflicts, Payment failure,

#### 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?*

* DriverPass shall allow administrators to alter customer information through interface.
* The IT Administrator shall have full access to system.
* System server software shall be updated weekly to maintain security and connectivity with all platform browsers.

#### 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?*

* User log-in shall require user ID and password.
* No less than 256 bit encryption will be used to access databases within system “back-end.”
* Accounts should be locked and require administrator reinstatement if attack is detected.
* The IT administrator shall have the ability to reset accounts in case of forgotten password

### 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 login information.
* The system shall offer 3 packages for customers to purchase
* The system shall allow users to make reservations
* The system shall allow for online learning/reading
* The system shall allow the Owner to download/update reports for use offline.

### 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 system shall have users and administrators
* Administrators shall be able to enter new client information
* The system shall display testing progress on client information page
* The system shall display client information on client information page
* The system shall accept and display driver notes on client information page
* The system shall display instructor photo (driver) and student photo on client information page

### 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?*

* Layout is not addressed in the above design. Though the owner brought a drawing of the specific layout he has in mind for the client page, there is no further information about UI layout at this time
* I’m making many assumptions about the system. For instance, the client states they want the system to operate on the cloud. Well, the cloud is not a magical place that simply exists. It’s a physical server in a physical location with software and an internet connection. These servers require specific software to create the type of interface the client wants.

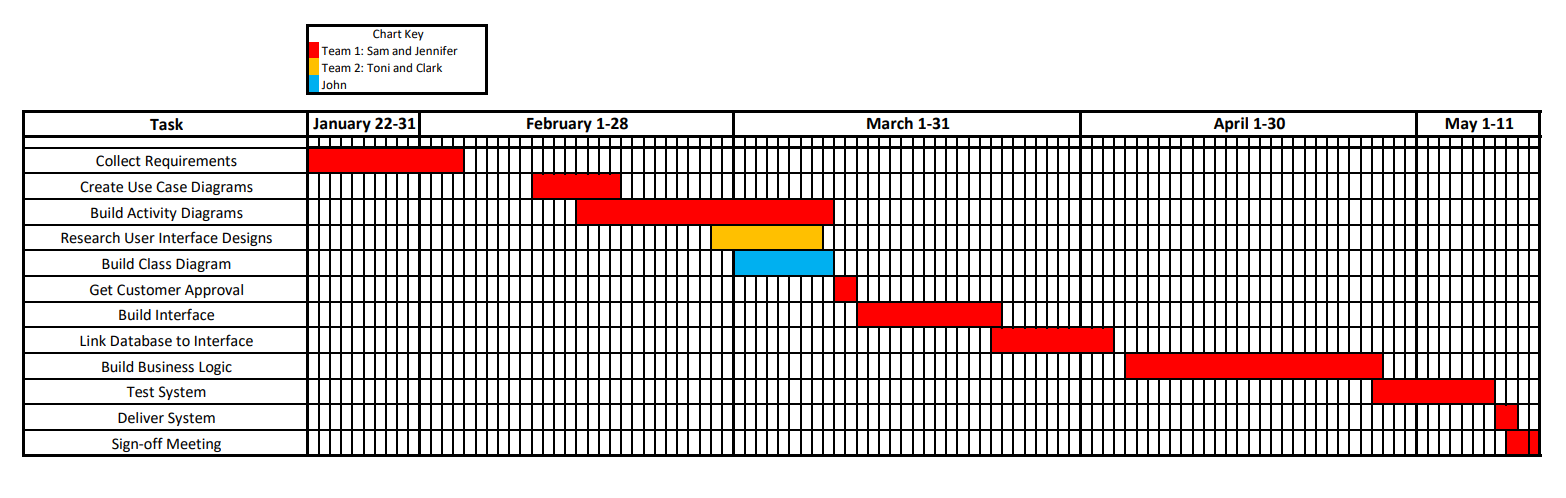
### Limitations

*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?*

* Some of the limitations the system has is that customers must physically make a phone call in order to schedule in-person training, create an account, or purchase packages. These are all things the client has opted out of, at least for now.
* As stated above, the cloud is a server in a room, so one limitation in the design is traffic. How much traffic will there really be, and how many servers will it take to handle that traffic.
* There is no mention of budget in the interview, nor about technology. The assumption is that my company has the server availability to handle the request.
* Time is limited based on the interview, with basically 3.5 months to complete the entire project, and a holiday week in that time frame, there isn’t much time to waste.

### 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.*

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