# 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?*

* Student drivers to take online classes and practice tests
* Provides on-the-road training as an additional feature
* Liam is the owner of DriverPass
* Access data on and offline

### 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?*

* Access data on and offline
* Help customers by providing exams and tools to pass their driving written exams
* Access data from any computer or mobile device
* Download reports and other information
* The system allows tracking – reservations, cancellations, modifications – print activity reports

### 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?*

* Admins need functionality for downloading reports, on and offline access, access reservation data and have flexibility for future changes
* Customers need to be able to reserve and cancel appointments, view online content, and access their profile
* Allow for secretaries to manage appointments over the phone, gathering information/data, and integration of the phone system into the DriverPass system

## 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 needs to be compatible cross platform, in other words, it needs to be compatible on IOS, Android, MacOS, Windows and possibly Linux.
* The website will also need to be compatible with different versions of the ES system, not just ES7. Additionally, the site will need to be compatible across different browsers such as Chrome, Brave, Safari, Edge, etc.
* Lastly, the system will also need to support video streaming, the system should allow/withstand multiple users streaming video at simultaneously

#### 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 needs to be cross-platform, therefore, it should be able to run on MacOS, Windows, etc.
* Additionally, since it needs to be cross platform, it needs to written in Java, so all of the developers need to be familiar with the language
* Since we will be managing a database of different users and have a backend to store that data. We need developers familiar with SQL to manage that database and possibly AWS to handle the backend

#### 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?*

* The system will work around or with users that have a unique identifier. The unique IDs of the users will be stored in the backend, where only authorized users such as admins and developers will have access.
* In case of an error, the system will give a unique identifier to identify the error and index it into the system so that developers know what happened and why it happened

#### 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?*

* The users will be stored within the system as objects and to CRUDs will be applicable to most data within the system without needing to change code.
* Developers and IT will have access to the backend to maintain and edit the system. Additionally, admins such team leads, management and others higher position users will have access as well. However, although they may edit or modify the backend, these users will not be able to see private data such as payment information or addresses, but will be able to remove such information.

#### 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 will have the ability to login from various devices/methods, such as authentictator apps for further security, but also a PIN through their mobile device
* Users will need a strong password with upper and lower-case letters a few numbers and a few characters
* There will be a secure encryption relaying between the user and backend, therefore, we choose to use HTTPS over TLS

### 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 for user authentication
* The system shall have an intuitive user interface
* The system shall meet security requirements in other words, different users have different authorization levels
* The system shall have resource management
* The system shall have notifications

### 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.)?*

* Users will need to be able to access the system from any of their devices whether that be mobile, hand-held, or traditional desktops, as long as they have an internet connection
* The owner wishes to access the data from offline
* Users will be able to see their progress and information regarding feedback or reading material on the subject they are learning
* Admins and IT will have their unique UI to manage and modify the site or data
* The UI will be intuitive so that users can easily maneuver the site

### 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?*

* It is assumed that most user will have the most updated version of their device and browser
* It is assumed that the driver for the videos on the site is unknown. We do not know if the driver will be first or third party

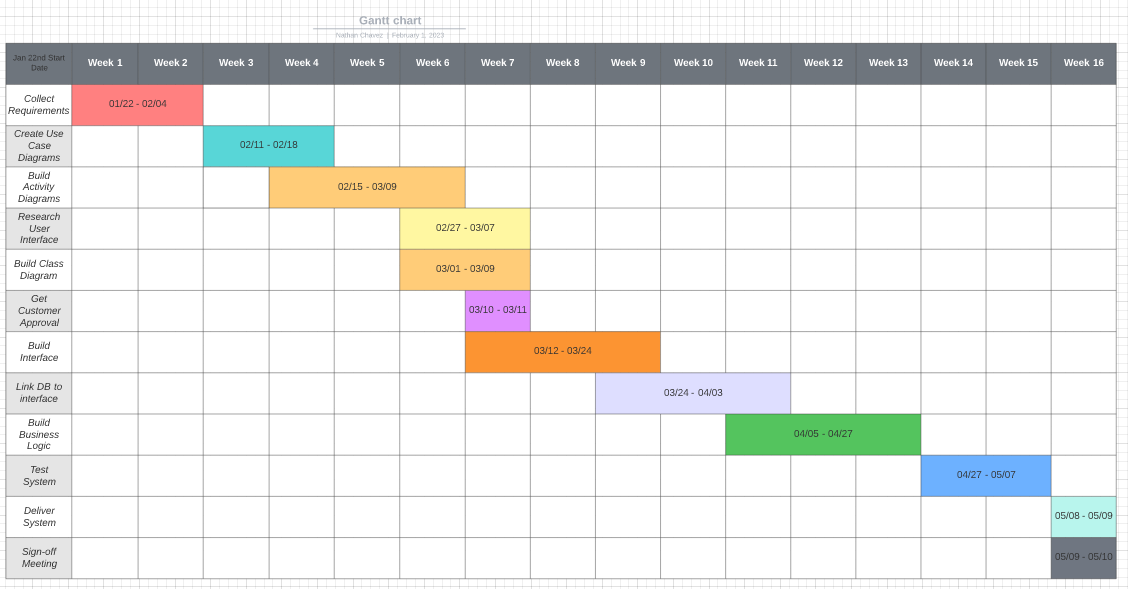
### Limitations

*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 lie within the time constraints the developers will have on each section
* There may be budget restraints that the team may face as a result of the lack communication between the client and the project manager, as a result developers will not know if their implementations of certain software or hardware will go over budget
* Although I recommend using Java as a language for all platforms, we do not know the language we will be using to code the system

### 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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