# CS 255 Business Requirements Document

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## System Components and Design

### Purpose

* The purpose of this project is to create a website that students looking for driving training/practice tests can go onto. On this website they will be able to create an account, schedule driving times with one of ten drivers/cars, modify or cancel their existing appointments, and complete driving practice tests. The costumer will be able to choose between one of three packages for their driving experience. Each one of these packages offers different amounts of driving time that will need to be scheduled over a number of days. Each driving lesson is two hours long. Liam, the company owner, will need full access to all accounts on this website in order to be able to reset costumers’ passwords or other needs like that. Liam would also like to be able to cancel packages that he no longer wants to offer.

### System Background

* DriverPass wants their system to be able to supply a service and content to its customers. The problems that they are trying to fix is the lack of this service and content. The systems that will need to be included in this project are a user interface, communication system with the DMV, and a database. The user interface will need to be easy to use and maneuverable for the costumer. The communication system must alert DriverPass when the DMV changes its policies or rules. The database will need to be able to keep costumer information including first name, last name, address etc. The whole system needs to be web based and run from the cloud.

### Objectives and Goals

* The system should be able to supply costumers with a way to access the service and content that DriverPass is trying to sell. The system will also allow Liam, the company owner, will need to be able to access all accounts so he can help users get into their accounts, remove old employees, etc. The system will be web based and run from the cloud. The tasks that will be included in the system design are collecting requirements, creating use case diagrams, building activity diagrams for each use case, research user interface designs, build class diagram, get customers approval, build interface, link database to interface, build business logic, test system, deliver system, and finally a sign off meeting. These tasks will be completed in the order listed above with start and end date to make progress on the project and a way to know we are still on track to meet our release date deadline.

## Requirements

### Nonfunctional Requirements

#### Performance Requirements

* The system will be web-based and run off of the cloud. This will mean the system will run quickly like it will need to in order to give the end user the best experience.

#### Platform Constraints

* The system will be web-based so it should be able to work on a number of different devices and operating systems. The client stated that they want to be able to use it on their phone so the system will need to be able to run on mobile operating systems as well. A database will be required for this system so that it can keep track of costumers and their appointments. The database will also be needed to keep track of appointments that the company has so that the costumer cannot double book an appointment.

#### Accuracy and Precision

* The way to distinguish between different users is to have them be able to create user profiles. This means that they will be able to have their own profile in order to book appoints and few past appoints and things of that nature. The system should have a bug reporter built in to it that users can use to alert the admin of a problem. This would be a way for the system to alert the admin of issues. If a part of the system is failing to work, the system should also alert the admin to this so that it can be fixed quickly.

#### Adaptability

* The system would not be able to make changes to the user object without changing the code, but information about costumers could be changed. This means that the user will be able to change their information on their profile. The system will need to be maintained in order to keep up with updates on the platform that it runs on. The IT team will need full access in order to fix bugs and update software as needed.

#### Security

* A user name and a strong password should be required in order to log in to the website. The reason for this is because it will store personal information and that needs to be protected. In order to protect user information, the SSL procedure will be required when exchanging data between the client and the server. If there is a brute force hacking attempt then the admin should be notified by the system and if there are enough tries without success, the account should be locked. The admin would then have to unlock the account after proof of identity from the account owner.

### Functional Requirements

* The system shall validate user credentials when logging in
* This system shall allow the user to create/edit a profile
* This system shall allow the user to book appointments
* This system shall display available appointments for users
* This system shall allow full access to the admin
* This system shall assign a driver to the user when an appointment is booked
* This system shall display user information on the first page for users to see
* This system shall allow users to cancel appointments
* This system shall allow users to automatically reset their passwords

### User Interface

* The needs of the user interface are to be easy to use. The client also said that they would like the opening page to look a certain way. It displays information about the user, driver notes, special needs, online test progress, and a photo of the student and driver. The interface will also need to allow the user to edit information in their profile as well as book and change appointments. The different users that will be using the interface are students at the school that the company is running. The user will be able to edit/ view their information, drivers notes and test progress. They will also be able to change, edit and view their appointments. The interface will need to support different types of platforms so that users can interact with it easily on any device.

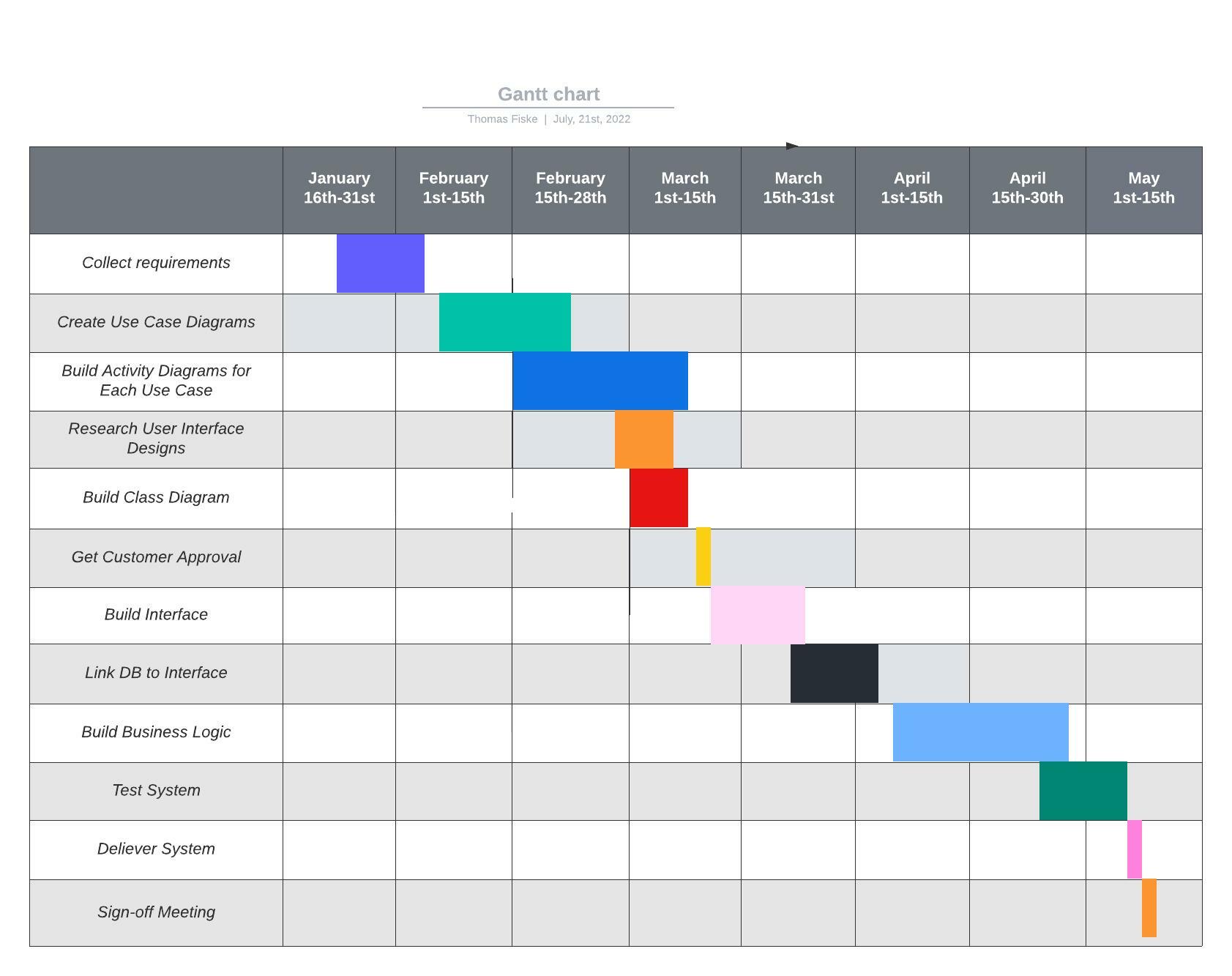
### Assumptions

* The things that are not specifically addressed in the design above are the volume of the system and how many potential costumers are going to use it. This will make the difference on how large the data base will need to be in order to store all of the user information.

### Limitations

* The limitations for this project are time, resources, and budget. This project will need to stick to the timeline that has been spelled out in the interview. This will help assure maximum client satisfaction. The budget and resources are the same, the project will need to stick to the budget and resources it has allotted for this project.

### Gantt Chart

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