# 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?*

* The purpose of this project is to supply drivers ed students with better resource and study materials to help them pass the driving test. The client is DriverPass and they want their system to be the hub for the tools that will help these students.

### 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?*

* 65% of students applying for the driving license exam fail because they were studying irrelevant and outdated versions of the test, and DriverPass aims to fix that. Different components include a website, possibly an application, study resources, practice tests, videos, pdfs.

### 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?*

* When completed, the system should be able to produce results of its users passing the drivers exam and possibly see an increase in the overall poll that was originally a 65% fail rate. Measurable tasks include how well the student is doing overall on DriverPass, and growth rates.

## 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?*

* Web-based and application would be good options. Web-based to have no downloading requirements, and application for limited offline usage. The system won’t require high end specs and should be optimized so that a low end computer can use the program reliably. The system should be updated frequently with new study material and videos, as well as new tests within relevancy.

#### 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?*

* This should run on all platforms, although Unix may be unnecessary and slow down development time. The backend will require data servers for the users information.

#### 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?*

* We can distinguish between different users by assigning an id to each one. Numerical IDs will make case-sensitivity irrelevant.

#### 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?*

* We can make changes to the user by making data structures, most easily a stack or a queue. The system will adapt to platform updates by self updating any plugins it uses via self maintenance shutdowns, such as Java. The IT admin needs console access, where the code includes console debug inputs.

#### 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 to call DriverPass in order to register. The user will need a username and password, along with an email and home address. This connection can be secured via HTTPS. If brute force hacking is attempted and fails, such as entering a password wrong five times, the account will time itself out for 1 hour and email the user about it, recommending them to make sure their account is secure. If the user forgets their password, they can request an email to be sent that can help them reset it.

### 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 user credentials when logging in
* The system shall provide all content for user
* The system shall show scores and progression
* The system shall store and encrypt user data in backend
* The system shall send trainer to users house on request through message for driving lessons

### 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 needs to be well organized, showcasing grades, taken and non taken classes and tests to the user. The user will interact with this interface on mobile by standard finger gestures on both the web and app version. The browser version on a PC will also work with standard design practices via the keyboard and mouse.

### 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?*

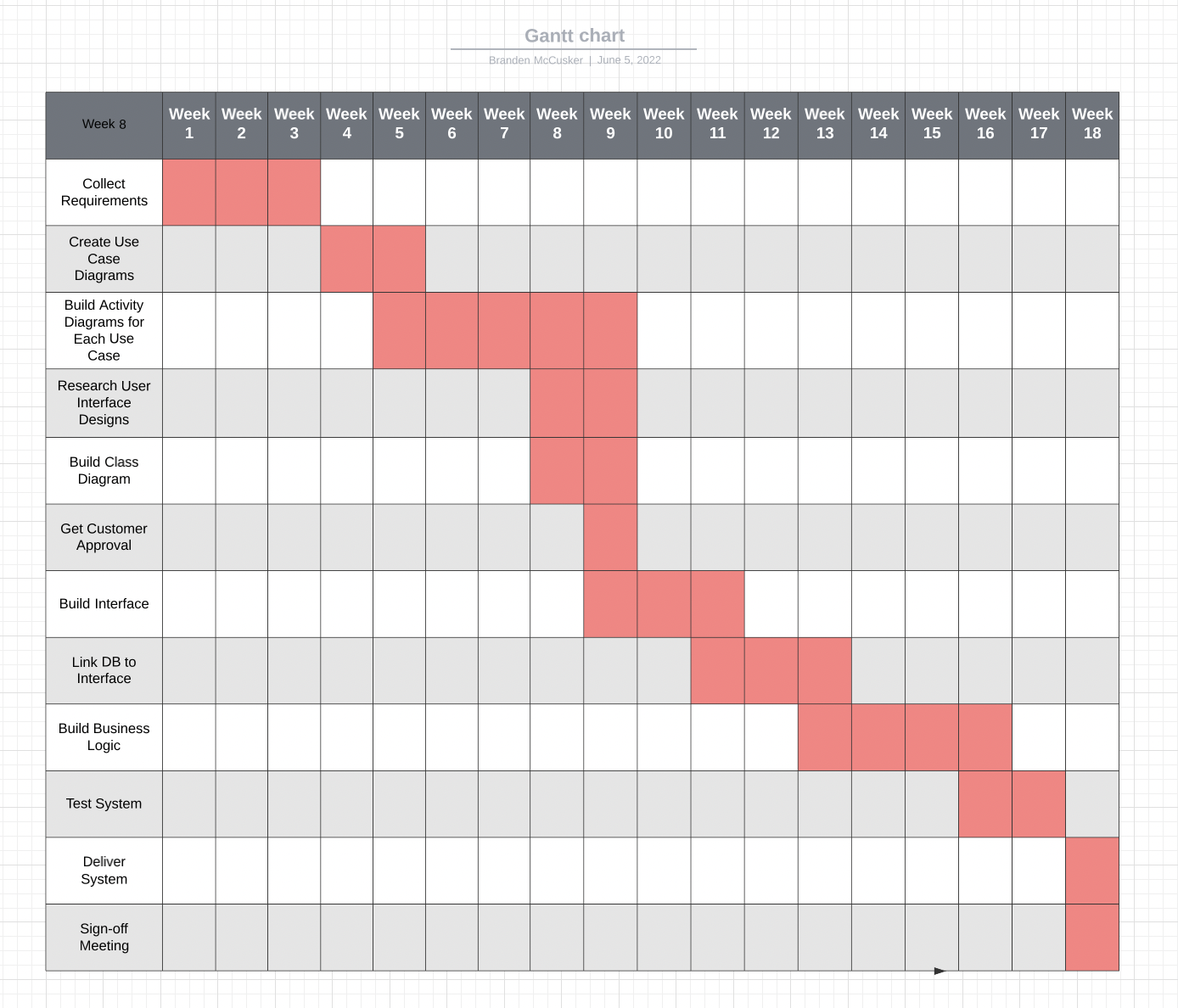
* Design and functionality wise, I am assuming the users have internet connection, as well as a PC or mobile device that supports current architecture.

### 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?*

* Limitations include resources, as non-repetitive and educational resources regarding drivers ed are presumably limited.

### 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.*