# 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?*

* Create an application for DriverPass that will allow users to access:
  + Course information
  + Course activities
  + Scheduling
  + Driving feedback

### 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?*

* Allow multiple users at once to access driving test preparation
* Allow admin access
* Allow instructor access
* Server
* Access nodes

### 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?*

* This system should register users and grant users access to program
* Successfully add users to database
* Feedback will indicate success of these operations

## 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, possible future offline application access
* Fastest speed given budget constraints
* System should be updated with new driving laws (or as desired/necessary)

#### 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?*

* System should run on all platforms
* Databases will be required, specifically for account storage and access

#### 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?*

* User ID’s / passwords
  + Case sensitivity not required but preferred given information stored
* Systems should always notify admin of problems. They might seem benign, however, having the data never hurts to have.
  + Possible account tampering / unwanted login attempts
  + Unwanted port access

#### 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?*

* User information should be DB based and therefore code editing will not be required
* Platform updates should be accompanied by entire system check to ensure compatibility with other system aspects
* IT admin should have access to all aspects of system. IT admin shouldn’t be held back by “red tape”.

#### 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 should enter ID and password
* Possible two-factor authentication
* Security can be bolstered using HTTPS
* Limited login attempts will ensure brute force hacking will be stopped
* Store security questions and responses for password reset or simply allow password reset through email

### 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 user feedback to all commands and processes
* The system shall allow user to access information from multiple devices, though not simultaneously
* The system shall allow user to access all course information given their purchase level
* The system shall allow user to access scheduling
* The system shall allow user to access driving feedback
* The system shall log user out after given time of inactivity
* The system shall allow for admin IT and admin access

### 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.)?*

* Consistency in design
* Ease of use
* Desktop and mobile optimization
* Students:
  + Courses
  + Scheduling
* Admin:
  + User editing (removal/modification)
  + Schedule modification
  + No design modification (don’t need someone thinking they know what they are doing and adversely modifying the system/UI; reserved for IT)
* IT
  + System modification (source code access)
  + Server access
  + DB access

### 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?*

* User will have appropriate hardware / software
* Client will have budget to keep up with required system / server updates
* Client has access to server or serverless system

### 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?*

* Users must be connected to internet unless an offline version is developed
* User must have a suitable device
* User must enter valid account and have an active subscription
* User must have a device with speakers/audio port (or subtitles must be provided in training videos)

### 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.*

