# CS 255 Business Requirements Document Template

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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?*

* DriverPass is designed with the intent to help aspiring drivers successfully pass their final examinations. Liam, the primary client of DriverPass, envisions the system as a versatile platform where learners can obtain driving assistance right from their home via a dependable online medium. It should facilitate the learners' access to online educational content and also enable them to schedule their practical driving lessons.

### 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?*

* DriverPass aspires to have a system that houses and dispenses online educational resources that promote effective learning among driving students. It should serve as a medium where students can conveniently schedule their driving classes. Upon booking a class, DriverPass desires to receive an alert. The system should present the users with three main package options. The ultimate aim is to curb the increasing trend of failures in the final driving tests. Necessary components for this project comprise online study materials, details of driving instructors, approvals from DriverPass management, and specifications about DriverPass's three primary packages.

### 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?*

* Upon completion, the system will facilitate:
  + User access to online study materials.
  + User reservation of preferred driving lessons.
  + Owner receipt of alerts about system changes.
  + Continual tracking of the system's activities.
* Metrics to evaluate the system's performance include:
  + Daily user login count.
  + Daily reservation count.
  + Daily count of reservation cancellations.

## Requirements

### Nonfunctional Requirements

* *A minimum of 2GB RAM.*
* *Stable internet connection.*
* *Basic internet literacy and search skills.*

#### 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?*

* Compatibility with Windows devices (any version), Kali Linux devices, and Android devices.
* DriverPass software installation completion in under 5 minutes.
* System updates every 3 months.

#### 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?*

* Compatibility with Windows devices (any version), Kali Linux devices, and Android devices.
* DriverPass software installation completion in under 5 minutes.
* System updates every 3 months.

#### 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?*

* Each user needs to register with unique credentials, such as an email address. Case sensitivity is critical for the system inputs and is communicated to new users during registration. This sensitivity aids in identifying clients and creating secure passwords. The admin is notified when:
* The system rejects a correct password.
* The reservation queue is empty.
* A user wants to modify a package.

#### 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 system is flexible and allows admins to make necessary modifications without altering the code. The user's details can only be amended upon their consent. The system adapts to platform updates and notifies users about new changes, guiding them to upload necessary documents. The admin requires access to cost, compliance, and convenience aspects in the IT department.

#### 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?*

* Two key inputs are required for user login: a username and password. Effective application of both technical and administrative controls ensures system security, maintaining privacy, warding off SQL threats, and preventing DoS attacks. Brute force hacking attempts lead to immediate account deactivation and admin notification. The system includes a password reset option for when users forget their 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 will:
  + Guide users through available DriverPass packages.
  + Provide study resources and exam papers.
  + Notify the admin of real-time system changes.
  + Enable user interaction with DriverPass customer service.
  + Allow users to save login credentials for future sessions.

### 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 execution requires admin permission and can be used by students, the admin, IT staff, and secretaries. User interaction can occur via a smartphone with internet access or a PC/laptop with a browser.

### 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?*

* The design assumes that each user:
  + Has a Google account (email).
  + Has reliable internet access.
  + Will find one of the three packages suitable for their needs.

### 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?*

* Can accommodate a limited number of reservations due to the availability of only 10 cars.
* Does not allow users to propose package prices.
* Has restricted resources (10 cars, limited number of instructors, and classrooms).
* Operates for 12 hours a day.
* Budget is confined to the three existing packages.
* Technology relies on a stable internet connection and system requirement of no less than 500MB RAM."

### 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.*

A screenshot of a project management

Description automatically generated