

## CS 255 Business Requirements Document Template

### 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, founded by Liam, who is our client, wants to offer online classes to help driving students prepare for practice tests and road exams.
- The intention of the project is building a system to improve DriverPass' training preparation so to help students pass their exams.
- To allow for the access of training materials via online and offline to support student studying.
- To help boost the efficiency among driving lessons and improve upon managing processes for scheduling.
- Developing a secure way of handling sensitive customer information.

### 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 wants their system to have driver training services, involving online classes, practice tests, and practice road exams.
- DriverPass wants to ensure customers have access to training materials and resources for their exam's.
- A straight-forward system that provides a stream-lined scheduling process for driving lessons and appointments.
- Improve upon already existing driver services and resources that do not offer enough for existing students.
- Providing access to online and offline resources to help individuals study for their exams.
- Improving upon bookings and appointments to improve on the overall scheduling process.

- Online classes and practice tests.
- Scheduling and management features.
- Payment processing.
- Robust security.
- A user-friendly website.

## 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?

- The completed system should be able to offer the planned services, including online classes, practice tests, road exam practice, and so-on.
- It should allow students to easily access training materials and resources for driving exams, or test
- The system should allow users to schedule their exams, tests, and practices, with ease.
- The development of user-friendly interfaces for its online resources.
- An optimized system that performance well ensuring smooth operation and responsiveness.
- Strong security.

## 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?

- The DriverPass system should more than likely run primarily in web-based environments. This will help ensure accessibility across different devices and platforms.

- The system should be designed to run efficiently and provide the customer with a smooth experience.

- Regular updates are crucial to ensure the system remains functional for its user and secure, protecting against threats.

### 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?

- I believe the DriverPass system should be created with the intent to run on multiple system, this way it can reach a wide customer base. But I will mention that Windows and MacOS are at the top of my suggestion list.

- Servers will need to be utilized. Servers will be used to help process requests and store customer data across various databases.

### 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?

- Users will be separated or identified based on different qualities/traits. Think of their usernames or email addresses, along with their passwords for confirmation.

- In this case, the input could be case-sensitive. Customers will need to be sure that their information is entered exactly as they created it.

- The system should automatically notify the admin of any issues or errors that occur during the systems operation.

## 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 should provide administrative interfaces or tools that allow the administration team or IT team, to make changes to user accounts without requiring changes to the code.
- The system should be designed with flexibility to ensure that it adapts to platform updates seamlessly.
- Continuous monitoring should address any issues that may arise after updates, or during running period.
- The IT admin requires extra privileges to perform various administrative tasks and system maintenance.
- This can be full access to user management functionalities to add, remove, or modify user accounts.
- The authority to troubleshoot and resolve issues and applying software updates.

## 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?

- For the user's login, their credentials such as a username or email address and a valid password need to be validated.
- Strong encryption and protocols should be mandatory to protect any sensitive data being transmitted over the network.

- If a brute force hacking attempt is being attempted, the system should look to locking the users account, or notifying the user, or admin team.
- If a user forgets their password, the system should allow for a way to recover their password, such as email, 2-factor authentication, so forth.

## 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 provide online classes and practice tests to prepare customers for their driving tests.
- The system shall authenticate user information during the login process, verifying the provided usernames and passwords.
- The system shall provide a password recovery system for users who forget their passwords.
- The system shall notify administrators of critical issues or errors encountered during system operation.
- The system shall allow users to schedule driving lessons and appointments, specifying preferred dates and times.

## 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 user-friendly and accessible across various devices and platforms.
- The interface should offer feedback to users regarding their actions, such as “success” or “error” message.

- Administrators
- Access student information.
  
- Students
- Book driving lessons on preferred dates and times.
- Access learning materials such as online classes, practice tests, and instructional resources.
  
- IT
- Manage user accounts.
  
- Users will be to interact through web browsers on their computers, laptop, or phones.

### 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?

- In the system information, details regarding payment processing were not mentioned.
  
- Assumptions were made regarding user familiarity with technology and internet.

### 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?

- In the system design, potential limitations may include scalability challenges as user demand grows.

### Gantt Chart

[illegible]