# CS 255 Business Requirements Document

## 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 aims to create an online platform that offers comprehensive resources for aspiring drivers to prepare effectively for their driving license exams. The client, DriverPass, envisions a user-friendly system that provides access to practice exams and on-the-road training, aiming to significantly improve the pass rates of driving license applicants.

### 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 seeks to address the issue of insufficient and ineffective resources for individuals preparing for driving tests. The system will comprise online practice exams, interactive training modules, user registration, content validation, and integration across various platforms.

### 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 should allow users to access a diverse range of practice exams, provide tailored on-the-road training modules, track user progress, and maintain an intuitive interface for both learners and administrators.

## 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 system must operate seamlessly on web and mobile interfaces, ensuring prompt responses. Updates to content should occur regularly to keep it current.

#### 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?*

* Support for multiple platforms, including web, mobile (iOS, Android), and backend databases to store user information securely.

#### 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?*

* Reliable user identification and immediate notification to administrators in case of issues.

#### 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 management capabilities without requiring code changes, adaptation to platform updates, and specific access for IT administrators.

#### 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?*

* Secure login procedures, encrypted data transmission, temporary account lockout after unsuccessful login attempts, and password recovery options.

### 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 a diverse range of practice exams tailored to different difficulty levels.
* The system shall offer on-the-road training modules for various vehicle types, each with specific skill sets.
* The system shall authenticate user credentials upon login to ensure secure 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.)?*

* The interface should cater to various user roles—students accessing exams and training, and administrators managing content and user accounts. Accessibility through both web browsers and mobile devices is essential for a seamless user experience.

### 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 users' proficiency in using standard web and mobile devices to access the platform for exam practice and training.

### 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?*

* Potential constraints include time limitations for system development, budgetary restrictions impacting technology choices, and reliance on user internet connectivity for system access.

### Gantt Chart

A colorful chart with multiple colors

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