# CS 255 Business Requirements Document Template

Reginald Cooper

## 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?*

* Client: DriverPass
* They want their system to offer online practice exams, on-the-road training scheduling, and progress tracking for students preparing for driving tests. The system should also support data access and management by different roles within the company.

### 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?*

* They want their system to fix a high failure rate among students taking driving tests due to inadequate preparation tools.

**Different Components:**

* Required System Components:
* Online practice exam platform
* Scheduling and management system for on-the-road training
* User management and access control
* Data tracking and reporting functionalities

### 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 system should be a user-friendly interface for students to access practice exams and schedule driving lessons.
* Enable tracking of student progress and performance.
* Provide administrative controls for managing users and data access.
* Ensure system scalability for future feature additions, such as new training packages.

## 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 applications accessible from desktops and mobile devices.
* Fast response time (under 2 seconds).
* Quarterly updates and maintenance.

#### 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 major operating systems (Windows, macOS, iOS, Android).
* Integration with a reliable database system (MySQL, PostgreSQL).

#### 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 roles different (students, instructors, admins).
* Immediate notification of any data entry errors or system 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?*

* There is an easy modification of user roles and permissions.
* Ability to disable or update training packages without significant system changes.
* Full access for IT admins to manage system settings and user accounts.

#### 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 user authentication, possibly with two-factor authentication.
* Secure data transmission (SSL/TLS).
* Account lockout after multiple failed login attempts.
* Password recovery options for users.

### 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 during login, ensuring secure access to the platform. It will allow users to access and complete online practice exams, providing essential preparation for driving tests. Also, the system will enable users to schedule, modify, and cancel on-the-road training sessions, offering flexibility and convenience. It will also track and report on user progress and training history, giving users and administrators valuable insights into performance. The system shall manage different user roles and permissions, ensuring appropriate access and functionality for students, instructors, and administrative staff.

### 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.)?*

* Interface from the Users
* Students: Need to access practice exams, schedule training, and view their progress.
* Instructors: Manage training schedules and track student performance.
* Admins: Oversee system operations, manage user accounts, and generate reports.
* The user will interact with the interface primarily through a web browser, accessible on both desktop and mobile devices.

### 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?*

* Users have access to the internet and basic digital literacy.
* The system will primarily be used through web browsers.

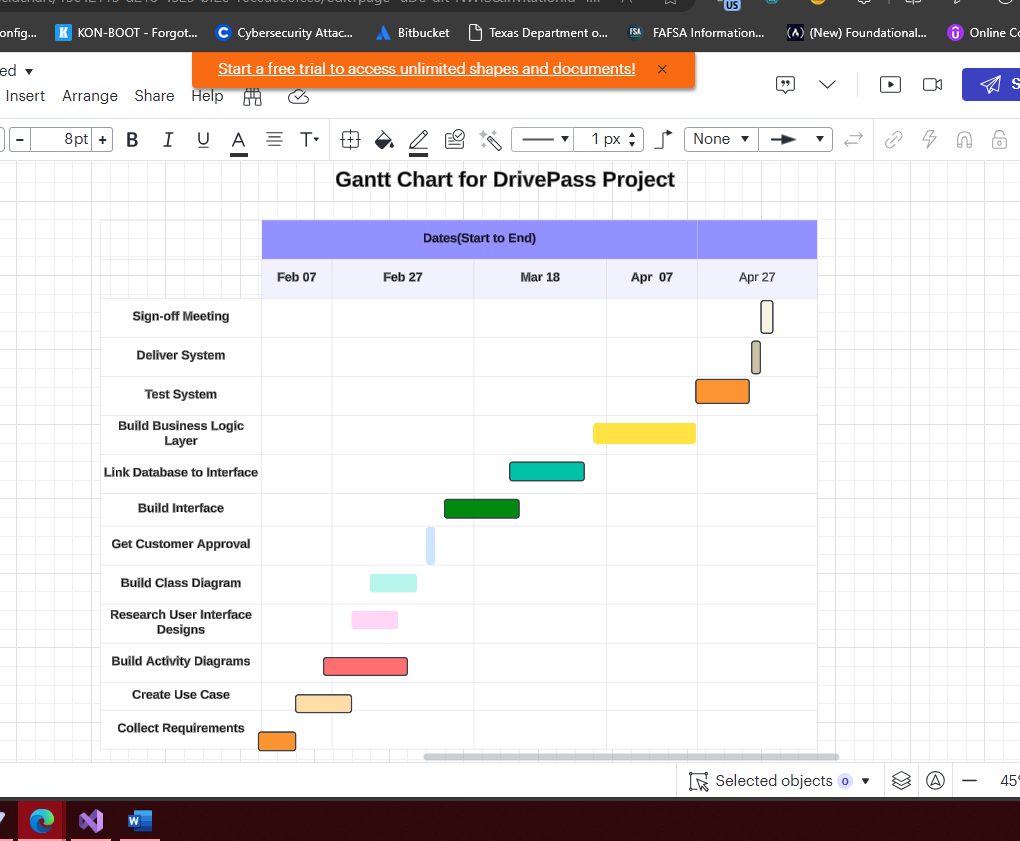
### Limitations

*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?*

* The system may be limited by budget, time constraints, and technological resources.
* Dependency on third-party services for scheduling and tracking may limit flexibility.

### 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.*

**