

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?

The client, DriverPass, wants a system that can provide better driver training to customers, helping them pass their driving tests at the DMV. The client with hopes to implement online training and practice tests, as well as having a real life training assistance from the Driver Pass staff.

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 the system to not only to be available online, but also offline. The system should have different levels of access for different employees, and the client wants to track user activity, such as who made reservations, who canceled them, and who modified them last. The users of the system will be customers who need driver training, employees who need to access the system for their jobs, and the system administrators who will manage and maintain the system.

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?

- provide better driver training to customers
- helping them pass their driving tests at the DMV
- students take their tests online, it should show the progress, as well as showing what's in progress.
- Classes, practice tests, on the road training.
- Reservations for driving tests

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 should be updated often to ensure that any bugs, or security breaches are fixed. Also, if there are any changes to DMV guidelines, it should be updated immediately, to ensure that students enrolled at Driver Pass are informed
- The system needs to be web-based to run
- The system should run at a decent speed, considering it must send back and forth requests to servers. At Driver Pass this speed should be quick, because of the users taking exams, etc.

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?

- Available to run on any browser that is commonly used
- Be coded correctly to fit any size screen from monitor to phone
- Would need a back end to store Information need to be kept on file and maintained

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?

- Being able to detect the proper username/email or Password
- Case sensitivity for customer protection and added security
- If login info is input a few times incorrectly then a notification email should be sent out for security reasons.

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 code would have to implement some sort of post request and controllers for the functionality to be available

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?

- Must have username and password to be able to access.
- Safe and secure data exchange should use an HTTP
- If the information is trying to be accessed from another location or someone is attempting to hack into their system, a notification should go out with any attempt.
- Reset password/username should be implemented if the user should forget their login information.

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 confirm the type of user logging in i.e., student or administrator
- The system shall display the three types of packages the client has suggested.
- The system shall allow the client to disable packages if one package is unavailable
- The System shall display the disabled packages on the consumer side
- The System shall allow user to reset passwords if needed.
- The system shall display exam progress and scores for the student
- The System shall confirm login information from user so that they can access information
- The System shall be adjusted to any DMV changes

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.)?

- Home Page
- Exam
- Access to all their scores and progression records
- User Information (updating passwords, address, etc)
- Registration (if the user is new)
- The user should be able to see any notes left by instructors, contact information
- The user should be able to see contact information

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 system will be available for access 24/7
- The users will be DMV students
- The system will remain up to date with any changes in the DMV guidelines
- Application version of DriverPass available in the future

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 requires a good and stable internet connection to be accessed. Without internet connection, user data cannot be updated according to any changes, nor added to the database.
- DriverPass is to help those study for their DMV, the materials and exams are based on the DMV guidelines
- The client currently has 10 cars, so the schedule needs to be accurately updated for students

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.

	Jan	Feb	March	April	May
Collect Requirements	22-jan	4-feb			
Create Use case Diagrams		11-Feb to 18-Feb			
Build diagrams for each use case		15-feb	9-mar		
research user interface		27-feb	7-mar		
Build class diagram			1-march to 9-march		
Get customer approval			10-march to 11-march		
Build interface			12 -march to 24-march		

Link database to interface			24-march	3-april	
Build business logic				5-april to 27-April	
test system				27-april	7-may
Deliver system					8-may to 9-may
Sign-off meeting					9-may to 10-may