Cayman Casteel

CS 255

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Project One

CS 255 Business Requirements Document

Tip: You should respond in a bulleted list for each section. 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 wants to provide Drivers Training to new drivers.
* Students to be able to take online classes and practice tests.

**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?

* The client wants offline access to the data to be able to download and review anywhere.
* Tiers of security, An IT tier with access to all accounts.
* Tracking records in system of who does what (driver making a reservation). Easily readable to be able to print out reports of records and changes.

**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?

* Customers need to be able to make reservations for driving lessons. Each lesson is two hours long.
* Customers should be able to tell us the day and time when they want to take that lesson.
* They should be able to make this reservation online using their account. Or they could call or visit our office to schedule an appointment with our secretary.

**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 will be run in a Web-Based environment.
* The system should be fast since online tests will be taken through this system and feedback on an answer given should be immediate.
* The system should be updated frequently since appointments and reservations will be made through this same system and you do not want an appointment or reservation to be double booked.

**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?

The system will be web-based so platforms should not be a constraint.

**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 have their own accounts, using user/pass to verify identity. Input will be case sensitive since we are dealing if government names and ID’s which will also have copies stored in the system. The system should inform the admin of a problem if there are any data breaches to the data of the users, as well as fake ID scan, double accounts.

**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?

Yes, users should be able to be added, removed, or modified without having to change code, no matter how many users. IT admins need full access to all accounts including employees.

**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?

Fo the user to log in, they must have their Username and Password that they created when they made their account. If the user forgets their password or username, they will contact the IT administrator who has access to all accounts to reset their password or find their username after verifying their identity through a way that was picked during account setup. For securing the connection between the client and the server, using SSL’s, encryption, hashing methods, and other various secure connections methods will work for this.

**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.”

Functional requirements that the system needs to provide:

* The system shall verify user credentials when logging in.
* The system shall track course enrollment of the students and their progress through each course.
* The system shall pair vehicles and drivers when reservations or appointments are made for driving.

**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 user interface should be consistent and easily readable so that the users do not get confused. The user interface should be able to show tests and response options clearly.

The different users in the interface are the students and the teachers. Teachers will have access to create tests for the students like in LMS used in schools that we talked about.

**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?

Since the system will be web-based, the users must be able to have access to the web. There is also the option of allowing the driving instructors to pick up the students if they are unable to get a ride to the learning center.

**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?

Initially, I see limitation with number of users able to keep maintaining the system since only one IT administrator is currently on the team. This means slower responses to any problems that require the IT administrator. The system can be easily expanded with the growth of users, but this will come in updates. Updates may have system down for a longer period during the start of the system being live.

**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.

