CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client's needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client's needs.

Tip: You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. 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?

- In the beginning, according to Liam, which is the owner of the company DriverPass, he acknowledges the fact that there needs to be better driving training.
- Ian is the IT officer for DriverPass who oversees maintaining the system.
- There is a secretary who will be answering the phone.
- He has noticed that multiple people have failed their tests at the DMV, and he wants to make a system where people can practice online and tests online.
- Liam also suggested that there will be an option where you can get on the road training as well if it is requested by the users.

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 main issue that Liam is seeing is that people are failing their drivers test.
- Liam wants to allow users to be able to get the proper training they need online in where they can take the test and pass it with ease.
- The components that are need for this are mainly drivers as well for people who request driving hours to practice.
- Along with the drivers who work, they need security, not just for the drivers but for the system of the company.
- Tracking will be good for a components for tracking workers and just in case some one gets let go, and also for users who make changes, for example availability.
- There needs to be a system where we can track the drivers and to see which drivers are going to be paired with which customer.
- Needs to be able to schedule driving hours.

- They are going to need a registration to be able to create an account to access these practice and tests.
- Need to make sure that the test are what the DMV requires of test takers.
- This needs to be on a web and is preferably over cloud.
- When scheduling hours there will be packages where package one: Six hours driving with trainer.
- Package two: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies
- Package three: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.
- There is specific picture as what they want it to look like.

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?

- This system should be able to allow the users to get the practice they need to be able to pass their drivers test.
- There is going to be a part where it shows the test progress, information, driver notes, special needs, driver photo and student photo.
- Within the driver notes there will be lesson time, start hour, end hour, and driver comments.
- There is a date where this project will get started because of other clients
- Should take around 22 days as said by Jennifer.
- Needs to collect requirements, create use of case diagrams, build activity diagrams, interface designs.
- Some other tasks would be build class diagram, customer approval, build more interfaces, link to a database, build business logic, test the system deliver the system and also sign-off meeting to complete this.

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 support online access from any computer or mobile device
- The system must support real-time data updates to prevent redundancy
- The system should track and log user activity, including who made, modified, or canceled reservations

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 must be web-based and preferably hosted on the cloud
- It should not require driverpass to handle backup and security, this should be handled by the platform provider
- The system must be compatible across major browsers and devices, including desktops, tablets, and smartphones, to ensure accessibility for all users

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?

- Must have test names, durations, scores and statuses
- Should include lesson times, including start and end times
- Should also have comments that are left by the drivers for things to work on and so forth

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?

- This should include future customization of packages
- Disabling a package without removing it entirely
- Integration with DMV systems for updates on rules and test materials

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?

- There should be the roles of the IIT officer and he or she will have full control like to reset passwords, and disable accounts
- Secure customer data collection including credit card info, addresses, and contact details
- User password reset functionality should be automated
- Tracking activity for accountability

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."

- User registration to collect user details including name, contact, address, pickup/drop-off location, and payment information

- Package selection to choose from three packages with different service levels
- The reservation management
    - Schedule lessons online or through a secretary
    - Assign drivers, cars, and times for each session
    - Track and display reservation details
- Online courses to provide access to DMV rules and the training content and track student test progress and outcomes
- Role based access control which the it will have:
    - IT admin manages user accounts
    - Secretary can book and manage appointments
    - Student can book, modify, or cancel their appointments
- The DMV integrations by receiving and applying DMV updates and notification

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.)?

- Login account recovery page with automated password reset
- Student dashboard to show online test progress and show lesson schedule and driver notes
- Forms for the student registration and contact info and for appointment scheduling
- Admin interface for managing accounts and viewing logs
- Contact pages for communication with students and staff

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?

- Customers have access to the internet for making reservations and taking online tests
- DMV provides a way to integrate and push updates
- Staff will use the system daily to manage bookings
- Cloud hosting provider will handle backups and basic security

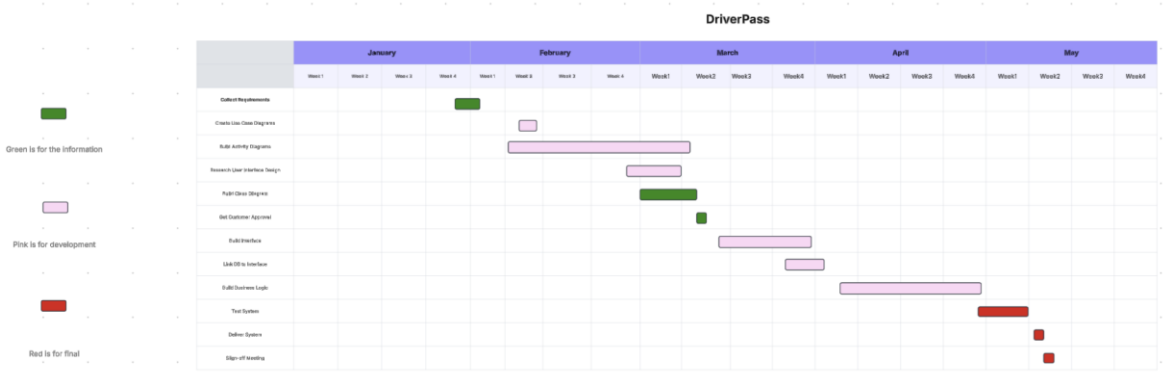
Limitations

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?

- Offline updates and modifications are not supported
- Package editing requires developer intervention and is not included in the current build
- Future features are deferred for now and not within current scope
- System assumes that pickup and drop-off locations are always the same

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.


DriverPass
January
February
March
April
May
Week 1
Week 2
Week 3
Week 4
Week1
Week2
Week3
Week4
Collect Requirements
Create Use Case Diagrams
Build Activity Diagrams
Research User Interface Design
Build Class Diagrams
Get Customer Approval
Build Interface
Link DB to Interface
Build Business Logic
Test System
Deliver System
Sign-off Meeting
Green is for the information
Pink is for development
Red is for final