LAB MST

Student Name:Rajiv Paul   **UID:20BCS1812**

Branch: CSE   **Section/Group: 607A**

Semester: 4th   **Date of Assignment:14/3/2022**

Subject Name: Software Engr.   **Subject Code: 22E-20CSP-255**

Q1.Consider the scenario

A Online bookstore is to be implemented. This project is a website that acts as a central book store. Such online bookstores tend to get a large amount of online visitors. In order to provide optimal performance and avoid site crash the system needs to be hosted on a cloud infrastructure. The sql database stores various book related details. A user visiting the website can see a wide range of books arranged in respective categories. The user may select desired book and view its price. The user may even search for specific books on the website. Once the user selects a book , he then has to fill in a form and the book is booked for the user. The system thus handles a large amount of users with ease using azure based cloud infrastructure. Design a project plan for the said project.

Aim: To draft idea on the above statement.

Features:

- Online Registration/Login.

- User registration.

- Book Inventory management.

- Book booking & availability check.

- Admin area.

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- **Software Requirements:**

  - Windows – 7 / 8 / 10/11 ,MAC OS X UPTO MONTEREY

  - Sql 2022

  - Visual studio 2022

  - MICROSOFT Azure ENTERPRISES

Hardware Components:

  - Cloud Server

  - Processor – i3/ i5/ i7/ i9/ M1/ M1 Pro/ M1 Max/ M1 Ultra

  - Hard Disk – 256/512 GB

  - Memory – 4/6/8 GB RAM

- **Advantages:**

  - Customers can get their book delivered instead of actually going and buying the book. They can make payment online/ case on delivery itself.

  - Managing of inventory in the shop for shopkeeper becomes easier as customers are not visiting and ordering online.

  - This system saves both time and travelling cost of customers.

  - User can get to know different kinds of books that they were unaware of by just searching in the system using keywords.

- **Disadvantages:**

  - The only disadvantage is that if the customer receives a book that is not in proper condition or wrong book is sent then the customers has to return the book which causes an additional charge of posting it back and also time too.

Applications:

- The system can be very well used by the book shopkeepers to expand their customers.

- The system can also be implemented in publishing houses.

Project Approach :-

1. Project Initiation

1.1 Planning

Project planning is a part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment.

Planning a project mainly consist of 3 steps :
1. Have a vision.
2. Make a timeline.
3. Build the core team.

1.2 Resource Allocation

- Project Staff resources will be available when and as they will be needed.

- Required hardware resources will be available when and as they will be needed.

- Required customer resources will be available when and as they will be required.

- Access to industry experts and specialized skills will occur as needed.

2 Project Execution

2.1 Designing

This part contains how the project will be designed. Mainly it is based upon the requirements of the user, the programmer have to do as the client says. What kind of appearances or other things the client needs.

2.2 Implementation

Implementation contains all the coding part of the project. If it's a large project, a team is required to accomplish it otherwise a single person can also complete the project according to the need of client.

2.3 Testing

This phase contains the testing of the project before handling it to the client. All the aspects of the project are check, whether the project is working fine or there is any error, if any then it can be removed before handling the project to the client.

3 Project Deployment

- Deliverables will be subject to no more then a specific numbers of review cycles.

- Software and equipment order lead times are known and can be expected to be met.

3.1 Installation

Installation contains all the steps like the installation of all the needs of the software as required by the project. We have to provide everything to the user even the software and also teach them how to use the project and what to enter where.

3.2 Documentation

- Documentation contains all the documents of the project, how to use it, what are the software and hardware requirements to run the project. Even the introduction to project and the build team.

3.3 Training

In this the client is trained on how to use the project and what to enter where.

4. Maintenance :-

4.1 Updates

- We will provide all the updates for the project to fix all the issues and bugs etc. All the new things will be added to the product with the update. The update can be optional as well as mandatory. The Updates will contain all the new things added to product and fix any problem.

4.2 Fixing Bugs

- In this the bugs in the project are fixed, they can either be fixed with update or either with the help of any software developer. Mainly the updates fix all the bugs, because they are released to fix all the bugs and problems of the product.

Rules And Responsibility :-

Name	Role and Position	Contact info.
Rohan	Software Developer	rohan@gmail.com
Rahul	Programmer	rahul@gmail.com

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6. Cost Estimate :-

- The statistics used in preparing the estimates are accurate within a given percent.

- Outsourced consulting will be limited to a specified number of days at a specified

rate per day.

- The cost estimate will depend upon the work of project and the staff.

7. Project Constraints :-

The project should have been modified a bit more, like all details should be shown somewhere about the doctors, patients and other details.The details of the doctor should be displayed on the screen when diagnosing the patient.

The overall project got so many constraints that need to be solved.

Q2.Suppose you are planning to develop a project on employee attendance. Design a project plan by using following scenario

This project is designed to take down employees' attendance using Qr code. Every employee will be having a card that contains a unique Qr code. Each Qr code represents a unique id for all employees. They just have to scan their cards in front of the webcam on arriving and the system notes down their attendance as per date and time. System then stores all the employees' attendance records. It generates an overall report in excel sheet for admin and even allows him to search for particular employees attendance.

Aim: To draft idea on the above statement.

Features:

- Admin login Panel

- Bar code Reading

- Report generation System

- Search option

- **Software Requirements:**

  - Windows – 7 / 8 / 10/11 ,MAC OS X UPTO MONTEREY

  - MySql 2022

  - Tools: Netbeans 7.2.1/Intellij Idea

  - Language:Java

Hardware Components:

- Cloud Server

- Processor – i3/i5/i7/i9

- Hard Disk – 256 GB

- Memory – 4/6/8 GB RAM

- Web camera

- **Advantages:**

- Employees will be more regular as the system notes down the time along with the attendance.

- Since now no attendance sheet signature is required, so no other person can make an attendance on behalf of others as QR Code are unique for every employee.

- No need to maintain attendance sheet as the attendance are electronically stored in database.

- The system helps the admin to easily find out latecomers.

- Admin can easily get attendance history of a particular employee.

- It saves time, cost, efforts and organization resources.

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Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			