DELIVERABLE -1

# GROUP DETAILS:

**Project Title**: Hospital Management System

**Team Name**: Unt Ignitors

**LIST OF TEAM MEMBERS:**

|  |  |  |
| --- | --- | --- |
| **Members** | **Contribution** | **Student ID** |
| DHEERAJ REDDY AGUTHU | Backend Developer, Database | 11555619 |
| ABHAY ARORA | UI Developer, Documentation | 11549231 |
| RAVI TEJA BALAJI | UI Developer, Database | 11514148 |
| PRAVEEN NAKKA | UI Developer, Database | 11532917 |
| CHARISHMA NAGA SAI SARADA BALUSU | Backend Developer, Documentation | 11525468 |
| GEETHA KRISHNA DODDA | UI Developer, Database | 11558520 |
| SRIKANTH GOPI | UI Developer, Database | 11514330 |
| MEGHANA JUNNUTULA | Backend Developer, UI Developer | 11539646 |

**PROJECT DESCRIPTION:**

We aim to create Hospital Management System that contains elements such as:

The Hospital Management System's key components are hospitals, patients, doctors, nurses,

appointments, and medicines.

The Hospital Management has secured all this data into a database by different means such as:

1) Hospital Management system have several modules that includes appointment module, treatment module, administration module and the registration module.

2) The application will be used by the four types of users (i.e., Admin, Doctors, Patients, Nurse)

3) Admin user has the access to perform different kind of operations that includes addition of doctors and their specialization and maintain patients’ information and overall staff info and it also has to perform other operations like addition/Edit/Remove of branches which are newly constructed or existing branches and update the details about the room availability and

medicine availability details.

5) Doctor has the access to view the list of patients, who has taken the appointment under him, and he can also schedule an appointment with the patient

regarding his treatment or any kind of surgeries. Doctors also have access to suggest an diet plan to the patients

6) Patients have access to see the remaining appointments pending to consult doctor,

# WEBSITE FLOW:

Diagram

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## TECHNOLOGIES TO BE USED TO DEVELOP THIS PROJECT:

|  |  |
| --- | --- |
| Frontend | HTML, CSS, JavaScript, jQuery, Angular |
| Backend | C#, .Net and ADO.Net |
| Database | MySQL |
| Run time environment | Visual Studio 2019, MS VS Code |
| Web server | WebAPI |

# INITIAL PROJECT PLAN:

Table

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**MEETINGS MINUTES:**

## Session 1: General Discussion on 21st January 2022

## Attendees:

|  |  |
| --- | --- |
| **Members** | **Student ID** |
| DHEERAJ REDDY AGUTHU | 11555619 |
| ABHAY ARORA | 11549231 |
| RAVI TEJA BALAJI | 11514148 |
| PRAVEEN NAKKA | 11532917 |
| CHARISHMA NAGA SAI SARADA BALUSU | 11525468 |
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| SRIKANTH GOPI | 11514330 |

**Things discussed:**

* Team members presented themselves and talked about their former work experiences.
* Group members discussed previous project contributions and shared some project ideas.
* Based on the discussion we choose technologies/frameworks that everyone could deal and manage throughout the project schedule

## Session 2: HMS Kick-off Meeting on 28th January 2022

## Attendees:

|  |  |
| --- | --- |
| **Members** | **Student ID** |
| DHEERAJ REDDY AGUTHU | 11555619 |
| ABHAY ARORA | 11549231 |
| RAVI TEJA BALAJI | 11514148 |
| PRAVEEN NAKKA | 11532917 |
| CHARISHMA NAGA SAI SARADA BALUSU | 11525468 |
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| MEGHANA JUNNUTULA | 11539646 |

**Things Discussed:**

* Talk about the Project ideas and conclude the Project topic
* Restructured deadlines and forthcoming assignments/tasks into Trello Kanban Board.
* Decided project complexity and common features
* Allocated the group members on basis of technical skill sets.

## Session 3 : HMS Deliverables-1 Meeting on 2nd February 2022

## Attendees:

|  |  |
| --- | --- |
| **Members** | **Student ID** |
| DHEERAJ REDDY AGUTHU | 11555619 |
| ABHAY ARORA | 11549231 |
| RAVI TEJA BALAJI | 11514148 |
| PRAVEEN NAKKA | 11532917 |
| CHARISHMA NAGA SAI SARADA BALUSU | 11525468 |
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| MEGHANA JUNNUTULA | 11539646 |

**Things Discussed:**

* Divide the deliverable-1 tasks among the team.
* Discussion on Gant/Pert Chart for Project milestone plan.
* Showed the basic outline of the project along with a common directory project structure.
* Discussion on Project Report and Ppt associated with Deliverable 1 tasks.

## RISK MANAGEMENT:

**Types of Risks**

General Risks

* 1. Communication between the Team Members
     + Lack of communication, causing lack of clarity and confusion.
  2. COVID 19 Risk
     + Team members catching COVID 19 (could result in serious illness)

Project Specific Risks

1. Coding/Merge Errors Risk
   * There might be some conflict or merge errors in the final code before phase deployment.
2. Technical Skill Insufficiency Risk
   * Some Team members don’t have much professional experience, or they are not technically sound in some of the technologies/frameworks.
3. Security Risk
   * User personal data (like passwords, name, address, contact number might get compromised)
   * Data Inconsistency Issue
4. Scalability Risk
   * How the system behaves, after the sudden increase in user-base.

**Plans to monitor the risks:**

* Conduct multiple meetings between team members to understand their concerns and to avoid any confusion concerning their tasks.
* Encourage team members to not attend in-person meetings if there are not feeling well. Get there Covid Test Done and remain in isolation for a few days as per the CDC Guidelines.
* Members like TL or Scrum Master will monitor Repo Commits on a random basis to avoid any conflicts in the final codebase.
* Peer to Peer Code Reviews and Code inspections will be scheduled after the development phases. More focus will be given to the quality aspect.
* Coding guidelines documents will be shared with the team before the actual development starts.
* Testing will be performed at every phase of development as an end-user.
* In-house training or technical talks will be organized between the team members to improve their technical expertise.
* Utilized adequate and extra time for each module and include additional time for end-to-end testing after each phase.

**Reevaluation of risks:**

* After fixing the bugs that occurred at the end of every phase, we will be re-evaluating them before starting a new phase.
* Backlog items will also be monitored from the Trello Board to check design/requirements risks.
* Walkthrough and Inspection of source code will be done.

**Contingency plans for the risks:**

* We do the testing considering every possible scenario(risks) that could occur.
* Workload will be allocated accordingly between the team if someone catches Covid 19.
* Sprint Review meetings will be organized to resolve functional and non-functional issues related to the application.
* A separate clone of the existing branch will be created in the repo to handle code conflicts and other merge issues. Git operations like Rebase or Cherry Pick will be performed to fix merge conflicts.
* To handle scalability issues, Load Balancer will be used on the deployment server.

## TEAM MEMBER ROLES & CONTRIBUTION:

|  |  |  |
| --- | --- | --- |
| **Members** | **Contribution** | **Student ID** |
| DHEERAJ REDDY AGUTHU | Backend Developer, Database | 11555619 |
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