DELIVERABLE -1

# GROUP DETAILS:

**Project Title**: Hospital Management System

**Team Name**: Unt Ignitors

**LIST OF TEAM MEMBERS:**

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

1. **PROJECT DESCRIPTION:**

We aim to create Hospital Management System that contains several modules that includes **appointment** module, **treatment** module, **administration** module and the **registration** module.

* The proposed application will be used by the four types of users (i.e., Admin, Doctors, Patients, Nurse).
* Admin user which is the root user has the access to perform different kind of operations that includes managing master data of doctors, patients, and other medical workers.
* Admin can also perform actions like addition of doctors along with their specializations , managing branches which are newly constructed or existing branches and update the details about the room availability and medicine availability details.
* Other user like doctor has the access to view the list of patients, manage appointments, provide second opinion on surgeries/operations.
* Patients can schedule appointments with different specialists. They can also add/update there personal health information.

# WEBSITE FLOW:

Diagram

Description automatically generated

## 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 |

**5. 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 |
| GEETHA KRISHNA DODDA | 11558520 |
| 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 |
| GEETHA KRISHNA DODDA | 11558520 |
| SRIKANTH GOPI | 11514330 |
| 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 |
| GEETHA KRISHNA DODDA | 11558520 |
| SRIKANTH GOPI | 11514330 |
| 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.

## 6. Project Schedule/Gannt Chart

Table

Description automatically generated

Chart, timeline

Description automatically generated

## 7. 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.

## 8. TEAM MEMBER ROLES & CONTRIBUTION:

|  |  |  |
| --- | --- | --- |
| **Members** | **Contribution** | **Student ID** |
| DHEERAJ REDDY AGUTHU | Backend Developer, Database | 11555619 |
| ABHAY ARORA | * Front End Developer * SCRUM Master * Coordinator * Project Management Activities (GitHub/Trello Board Management) * Requirement Facilitator * Front End Architect | 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 |

1. Member contribution table (should describe who wrote what parts of the report). Add more rows as needed.

|  |  |  |  |
| --- | --- | --- | --- |
| Member name | Contribution description | Overall Contribution (%) | Note  (if applicable) |
| Aguthu, Dheeraj Reddy |  | 20% |  |
| Abhay Arora | * GitHub Repo setup * Trello Board and Cards setup * Deliverable 1 Documentation * Project Scoping and Planning * Discussion on Risk Management * Meeting Schedules (MOM) * Roles Evaluation * Creation of Project directory structure * Design Doc and Requirement Analysis | 20% |  |
| Nakka, Praveen |  | 20% |  |
| Gopi, Srikanth |  | 20% |  |
| Junnutula, Meghana |  | 20% |  |
| Balaji, Ravi Teja |  | 20% |  |
| Dodda, Geetha Krishna |  | 20% |  |
| Balusu, Charishma Naga Sai Sarada |  | 20% |  |