International Journal of Recent Advances in Multidisciplinary Topics
Volume 2, Issue 7, July 2021
https://www.ijramt.com | ISSN (Online): 2582-7839

Assembly Management System

Nisha Chettri[1*], Ranju Pradhan[2], Sharmila Rai[3], Prabina Bhujel[4]
[1,2,3,4]*Student, Department of Computer Engineering, Advanced Technical Training Centre, Gangtok, India*

***Abstract*: The title of the project is "Assembly Management System (AMS)". This project is aimed at developing an online application for the Assembly Management System. This project is designed by understanding the problem faced in the early system. The Assembly Management System application will help in managing student details like student standing system and assembly conduction turn which will become easier with one such system. It is an online based application that can be used by all the student throughout the college and it also provide a proper login**

***Keywords*: Admin Panel, User Panel, HTML, CSS, Bootstrap, MySQL, PHP**

1. Introduction

The Assembly Management System is a Web-based application which can be used for managing college daily work. It is a multi-user system and can be used by multiple of user at same time. It includes process like registration of the student details, verifying the standing position using student height's, aware the student for their assembly conduction, notification through SMS/Email.

1) Purpose

The website Assembly Management System is developed for updating Morning Assembly Conduction. The main purpose of this project is to ease the access of the student who have to conduct the Assembly and the activities that they are going to do (Example: HRP, Technical Term, Thought for the day and News). There is a message sending system which will be send by the admin through which the student can be notified beforehand that their turn for Assembly Conduction is nearby.

2) Scope

This system has actually designed for the Assembly Conduction where the students can check their dates an activity about their Assembly Conduction Turn. Some of the features of admin are:

- Admin can view, update, add and delete profile information of students.
- Send E-mail to students when their Assembly Conductions nearby.
- Admin has an event calendar where, admin can add, update events in the calendar.

Some of the features of students are:
Students can view their Assembly Conduction turn.
Students can check their standing position trade and semester wise in place allocation. Students can send E-mail to the proxy person if he/she is not able to conduct the Assembly.

2. Overall Description

1) Product Perspective

This project will be very helpful for both teachers and students. It will be easy to maintain the records of the student's assembly conduction role. This website is easy to use. Admin will be able to send E-mail to the student when their assembly conduction turn is nearby.

2) User Interface

The User Interface of this project has been specially designed for students. Our website is a user friendly and menu-based interface. It can be used by both admin and students.

3) Software Interface

- Front End: - HTML, CSS, Bootstrap
- Back End: - MySQL, PHP
- Database: - SQL server
- Web Server: - Xampp

3. Problem/Solution

1) Problem Definition

The students are not able to track their turn for the trade wise assembly conduction. Sometimes student get absent without informing because of that the person next to him/her will not get the chance to prepare for assembly conduction. It is hard to deal with every set of new students everyday assign them to their roles of activity each day by a single faculty member. Students are not aware about the position where they should stand during the morning assembly.

2) Solution Strategy

Anytime the student can track the date for the assembly conduction. This system will keep the record of the assembly conduction of each trade that when they had conducted the assembly in previous time. Our website can allocate a specific position for the students looking at the height.

4. Design

1) Iterative Waterfall Model

The iterative waterfall model provides feedback from every phase to its preceding phases.

*Corresponding author: nishachettri82@gmail.com

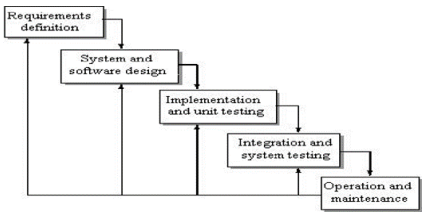


Fig. 1. Iterative Waterfall Model

2) Phases of Iterative Waterfall Model

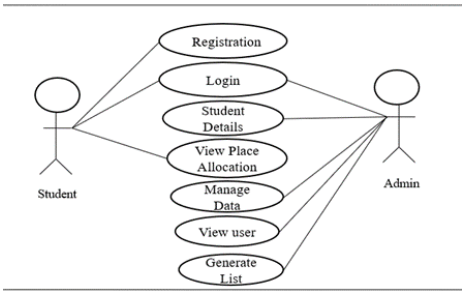
- Requirement's definition
- System and software design
- Implementation and system testing
- Integration and unit testing
- Operation and maintenance

3) Short coming of waterfall model

- It can handle the different types of risk that are real life software project subjected to.
- To achieve better efficiency and higher productivity most real-life projects cannot follow the refit phase sequence it goes by the water fall model.

4) Use Case Diagram

Use Case diagram shows how our website performs task. There are two users they are: -Admin, Student.



5) Data Flow Diagram

A DFD is a graphical representation of how data flow in a system in form of input and output. There are three levels of DFD: -

- 0-Level DFD
- 1-Level DFD
- 2-Level DFD

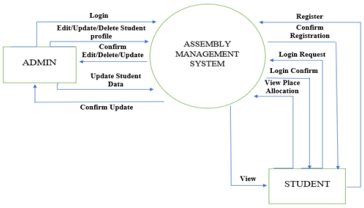


Fig. 2. 0-Level DFD

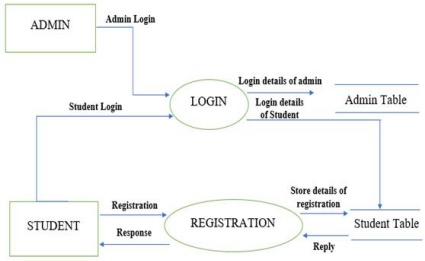


Fig. 3. 1-Level DFD

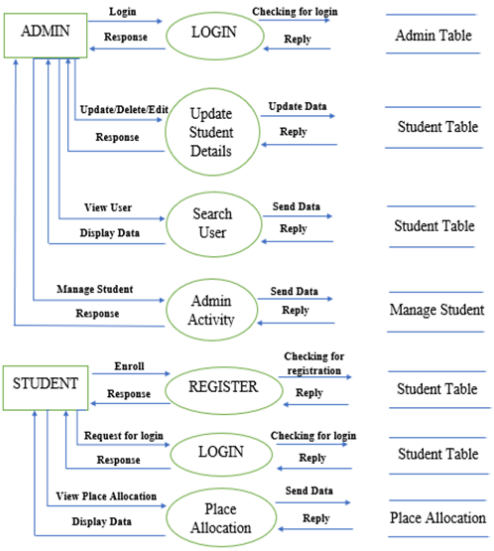


Fig. 4. 2-Level DFD

6) ER Diagram

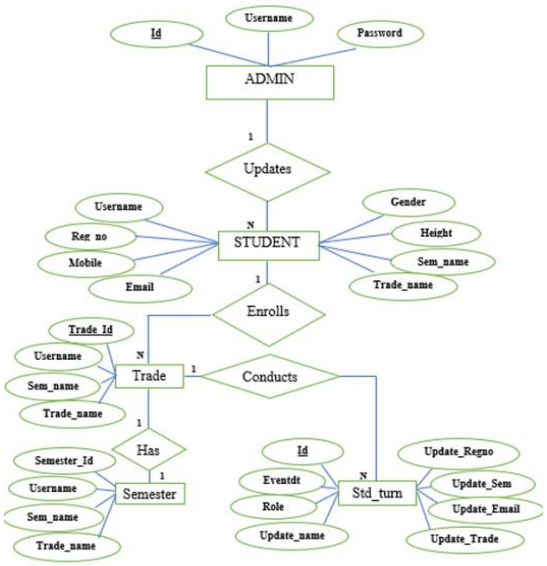


Fig. 5. ER Diagram for Admin

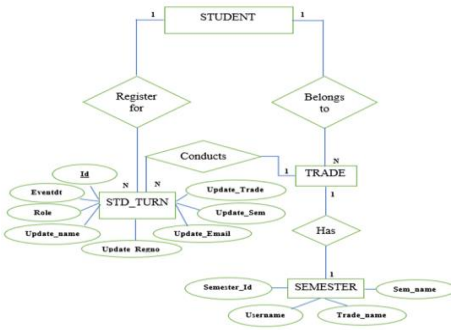


Fig. 6. ER Diagram for Student

7) Gantt Chart

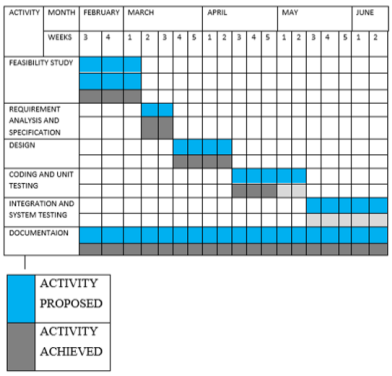


Fig. 7. Gantt Chart

5. Result

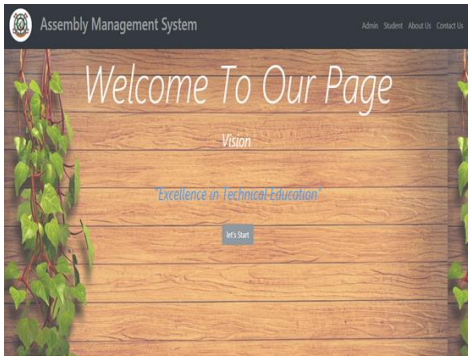


Fig. 8. Home Page

Fig. 9. Assembly Conduction Page

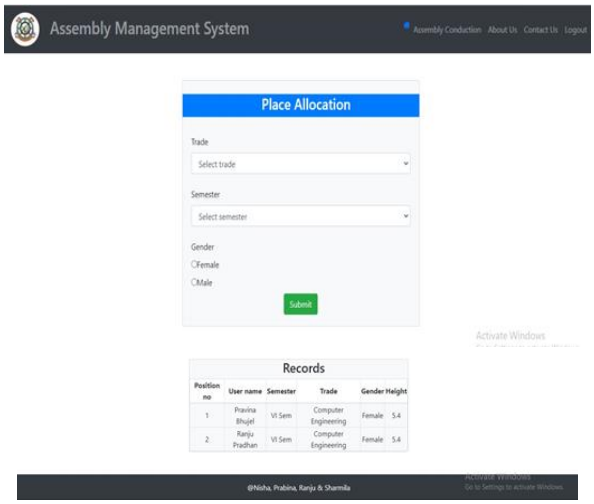


Fig.10. Place Allocation Page

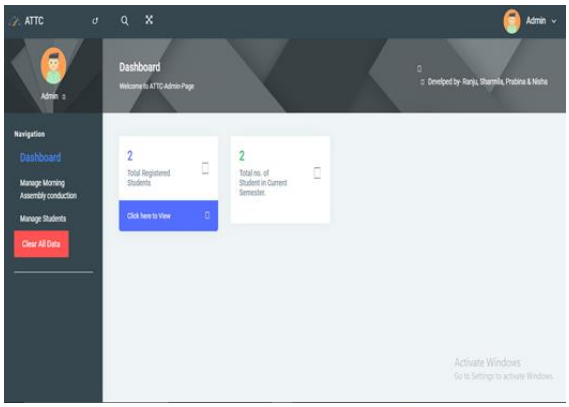


Fig. 11. Admin Panel

Fig. 12. Update Assembly Conduction Turns Page

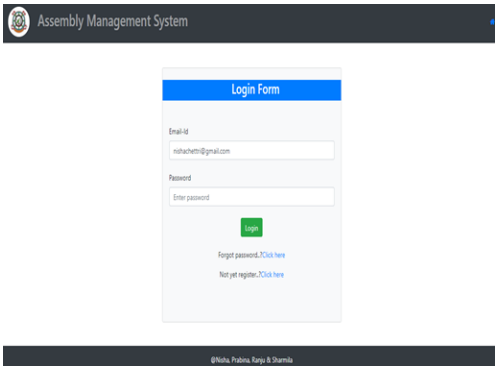


Fig. 13. Student Login Page

Fig. 14. Admin Login Page

6. Conclusion

We would like to conclude by saying that this website can be used to smartly manage our assembly system. The project entitled as Assembly Management System is the system that deals with the issues related to a particular institute.

7. Future Scope

This project is based on instituted system where these application gives maximum services in a single website product that is used by the students. The purpose of these system is easy to maintain all the records and data of student. This project will include height wise standing position and morning assembly conduction system. The user login to system with a username and password. To automate the assembly conduction. To inform the students assembly conduction day through email.

References

[1] https://youtu.be/7S42lpImZ4s
[2] https://youtu.be/NVpaYBgcd_M
[3] https://youtu.be/rvR2GF6MviU
[4] https://youtu.be/FlE52QJXWHY
[5] https://youtu.be/FlE52QJXWHY
[6] https://youtu.be/mV0-blkc7Vo
[7] https://youtu.be/851ziRwvyv0
[8] https://youtu.be/Ca2pegmZRk8
[9] https://youtu.be/F65zrW7Jbus
[10] https://youtu.be/mPr3ExTYyhk
[11] https://youtu.be/gCo6JqGMi30
[12] https://youtu.be/OQEBBXSTRfk
[13] https://www.w3schools.com/bootstrap/