A

PROJECT SYNOPSIS

ON

**"PDM-Teams"**

submitted in partial fulfillment of the requirement for the award of degree of

**BACHELOR OF TECHNOLOGY**

IN

**Computer Science & Engineering**

**SUBMITTED BY:**

**Deepansh Singh (A40319001/20)**

**Batch: 2019-2023**

**PROJECT GUIDE:**
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**Department of Computer Science & Engineering**
**Faculty of Engineering & Technology**
**P.D.M. University, Bahadurgarh**

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## Project Title:

PDM-Teams

## Team Members: (1)

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**Front End:** HTML(Hyper Text Markup Language) , CSS (Cascading Style Sheet)

**Back End Connectivity:** Javascript , Node Js , Express , Web Sockets.io, WebRTC

**Framework required:** Internet Explorer (5.0 and up) or Mozilla Firefox (6.0 and up)

# ABSTRACT

This project is an example of server to server communication which is basically based on public video conferencing and chatting. The app allows multiple users to chat and video conference together. The messages will be updated without refreshing the page. For simplicity we will be avoiding the authentication part. The user should enter user name to chat and paste the link in the browser to connect.

Most of the tools designed are made using HTML, CSS, JAVASCRIPT and NODE.JS. The main impact of software is the interaction with the user of the program via peripheral devices like keyboard, mouse, etc.

# OBJECTIVE & SCOPE

The objective of the Project Entitled as PDM-Teams is to provide a private communication portal to the organisation with the users accessing it as remote clients on Internet or local networks. Our university website doesn't have a real time video conferencing app and help of third party conferencing apps is taken. So it is an attempt to make an online conferencing portal so that we can take all our classes without facing any type of lagging. We also face the network problem in the period of covid-19 which tends to cancelling the required class. As we are providing the chatting feature to the project so it is very easy to the teachers to answer the query of students by the text. Text sharing is very important to communicate to other students so that everyone should connect to the portal very easily.

# INTRODUCTION

## PURPOSE OF THE PROJECT

- Our university website doesn't have a real time video conferencing app.
- So it is very difficult for the student to attend online class so I decided to make an online conferencing portal so that I can take my all classes without facing any type of lagging.
- We also face the network problem in the period of covid-19 which tends to cancelling the required class.
- As we are providing the chatting feature to the project so it is very easy to the teachers to answer the query of students by the text. Text sharing is very important to communicate to other students so that everyone should connect to the portal very easily.

# TECHNICAL DETAILS

## SOFTWARE REQUIREMENTS:

■ HTML(Hyper Text Markup Language) , CSS (Cascading Style Sheet) (Front End)
■ JAVASCRIPT , NODE JS , EXPRESS , WEB SOCKETS.IO, WebRTC (Back End)
■ Microsoft Windows , Linux , Mac (All OF THEM)
■ Internet Explorer (5.0 and above) or Mozilla Firefox (6.0 and above)
■ VSCODE text editor , A Bash terminal / command prompt.

## HARDWARE REQUIREMENTS:

■ Intel core 2 (minimum spec)
■ Ram :- 2 GB
■ Computer Memory :- 128 GB
■ Intel HD graphics (minimum version 15.40.46.5144)

# METHODOLOGY

Agile is a set of techniques to manage software development projects. It consists in: • Being able to respond to changes and new requirements quickly. • Teamwork, even with the client. • Building operating software over extensive documentation. • Individuals and their interaction over tools. We believed it was a perfect fit for our project since we did not know most requirements beforehand. By using the Agile, we were able to focus only on the features which had the most priority at the time.

▸ Agile project management is an iterative approach to project management which allows you to break large projects down into more manageable tasks tackled in short iterations or sprints. This enables your team to adapt to change quickly and deliver work fast.
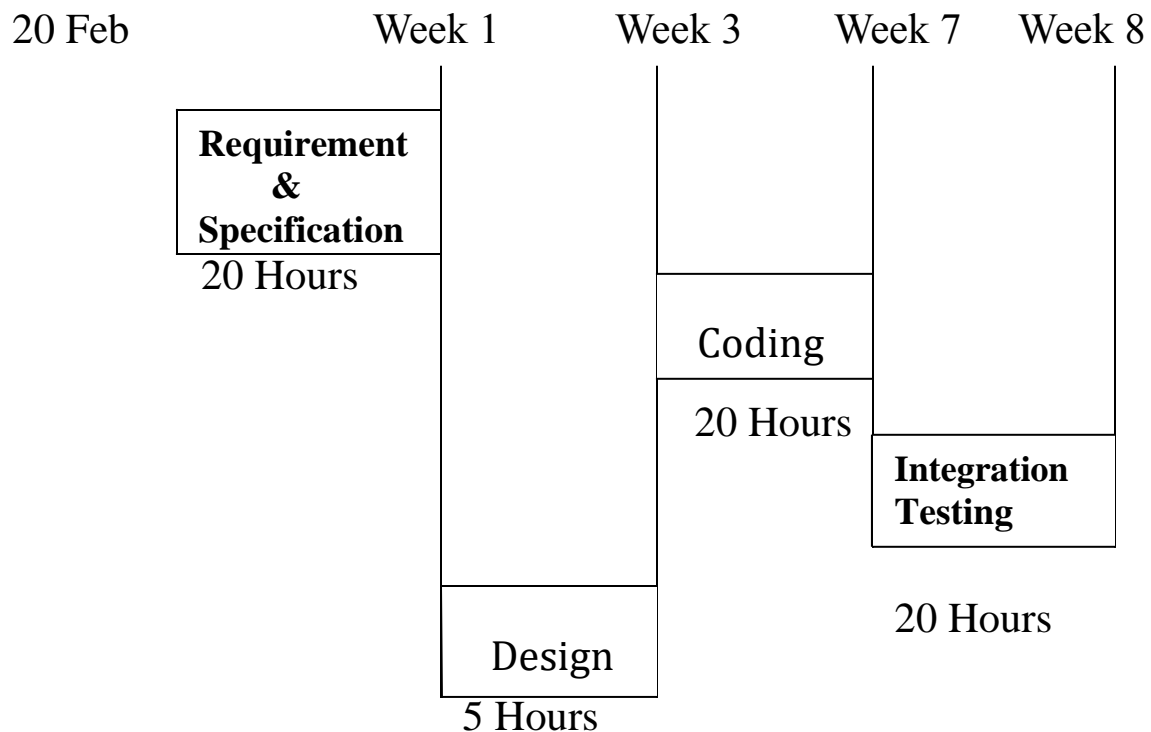
## Steps of the Agile Methodology:

# GANTT CHART

Gantt charts are useful for scheduling budgeting and resource planning. A GANTT is a type of BAR chart where each chart represents activity. The bars are drawn along a time line. The length of each bar is proportional to the duration of time plan for the corresponding activity. In the GANTT chart used for software project management each bar consist of a white part and a shaded part. The white part of the bar shows the length of time each task is estimated to take. The shaded part shows the slack time i.e. the latest time by which the task must be finished. According to the problem, one engineer can do the database design and code whereas another engineer can design GUI part, code the GUI part and still have the time left for writing the user manual.

| 20 Feb | Week 1 | Week 3 | Week 7 | Week 8 |

**Requirement & Specification**
20 Hours

Coding
20 Hours

**Integration Testing**

20 Hours

Design
5 Hours

# REFERENCES

1. https://css-tricks.com/

2. https://nodejs.org/en/

3. https://developer.mozilla.org/en-US/

4. https://www.npmjs.com/package/websocket

5. https://expressjs.com/

6. https://webrtc.org/getting-started/overview