# Sentimeet

Phase 2

#### NepCoders:

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#### **Submitted To:**

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## **Key Winning Feature**

- Al powered smart summarization
- Engagement Analytics dashboard
- Low latency, stream optimization

## **Capabilities**

- WebRTC-Based Video & Audio Calls
- Speech-to-Text Transcription
- Smart Meeting Summaries
- Task distribution and deadline
- Seamless cross platform support

### **Justifications**

- WebRTC-Based Video & Audio Calls
  - Low Latency & High Quality
  - Cost-Effective
- Al-Powered meeting summarization
  - Enhances Communication
  - Business Value
- Analytical dashboard
  - User insights and decision making
  - Enhances employee productivity
  - Task distribution and deadline

## **Target Market and Value Propositions**

#### **Target Market**

Businesses, project managers, remote teams, and educators.

#### **Value Propositions**

Al-based task extraction & assignment

Automated speech-to-text & summarization

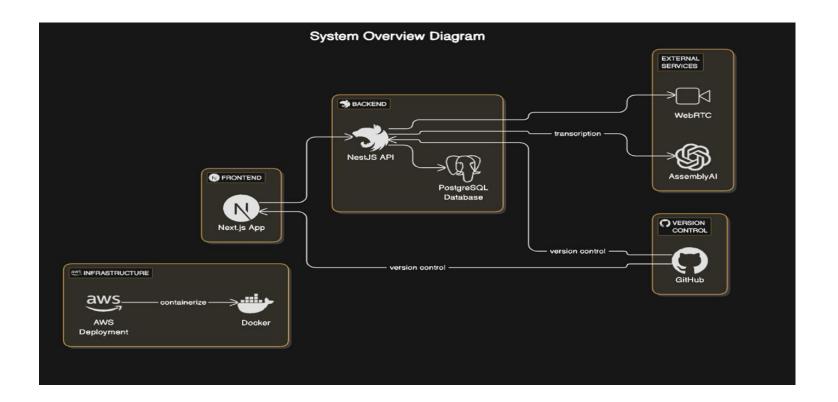
Boosts productivity & saves time

Integrated video calls & task management

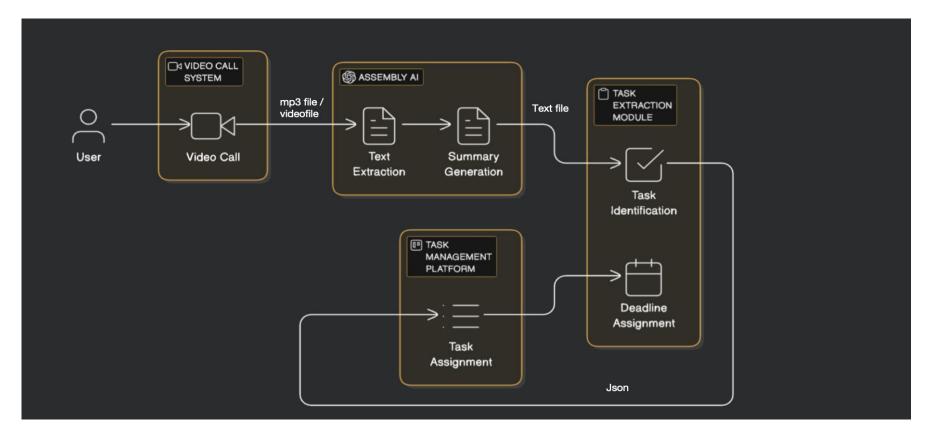
## Current Offering and limitation

- Fireflies.ai (Al meeting assistant with transcription and summarization)
- **Limitations**: Limited to keywords extractions and video summary.
- Microsoft Teams Al Recap (Transcription and meeting summary feature)
- Limitations: Limited on text-based summaries rather than actionable performance insights.

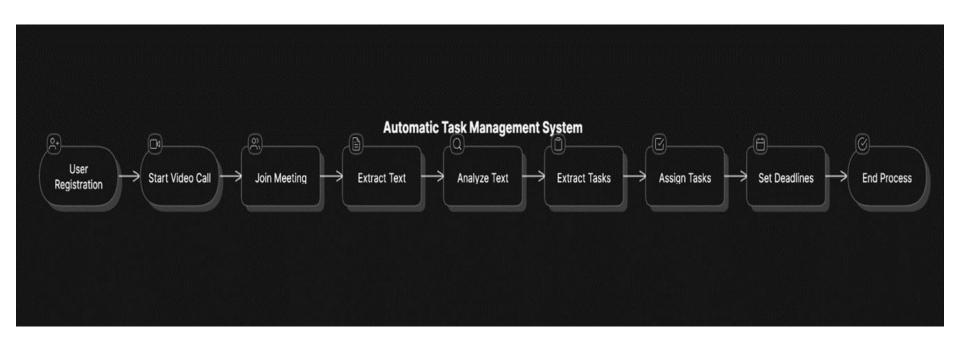
## **System Overview**



## **System Architecture**



### **Workflow**



### **Database Schemas**

### **Users Table (users)**

Column Name	Data Type	Description
user_id	UUID (PK)	Unique identifier for the user
name	VARCHAR(255)	User's full name
email	VARCHAR(255)	User's email (unique)
role	ENUM('Admin', 'User')	User role in the system
created_at	TIMESTAMP	Timestamp of user creation

### **Database Schemas**

## **Meetings Table (meetings)**

Column Name	Data Type	Description
meeting_id	UUID (PK)	Unique identifier for the meeting
host_id	UUID (FK)	References users.user_id
		(meeting host)
title	VARCHAR(255)	Meeting title
meeting_date	TIMESTAMP	Date and time of the meeting
summary	TEXT	Al-generated summary of the meeting
created_at	TIMESTAMP	Timestamp of meeting creation

### **Database Schemas**

## Tasks Table (tasks)

Column Name	Data Type	Description
task_id	UUID (PK)	Unique identifier for the task
meeting_id	UUID (FK)	References meetings.meeting_id
assigned_to	UUID (FK)	References users.user_id (who the task is assigned to)
task_description	TEXT	Task extracted from transcription
status	ENUM('Pending', 'In Progress', 'Completed')	Task status
deadline	TIMESTAMP	Deadline for task completion
created_at	TIMESTAMP	Timestamp of task creation

## Implementation Plan

#### Week 1: Planning & System Design

Define system requirements & features

Design architecture, workflow, and database schema

Set up frontend & backend repositories

#### Week 2: Authentication & User Management

Backend: Implement JWT/OAuth authentication, user registration, and login

Frontend: Develop login/signup UI and integrate authentication

#### Week 3: Video Calling & Meeting Management

**Backend:** Implement WebRTC-based meeting creation & storage

Frontend: Develop meeting dashboard & video call UI

#### Week 4: Speech-to-Text & Al Analysis

Backend: Integrate Assembly AI for transcription & GPT for summarization

**Frontend:** Display real-time transcripts & meeting summaries

#### Week 5: Task Extraction & Assignment

**Backend:** Implement AI task extraction & auto-assignment **Frontend:** Develop task management UI & notifications

## **Implementation Plan**

#### Week 6: Testing & Deployment

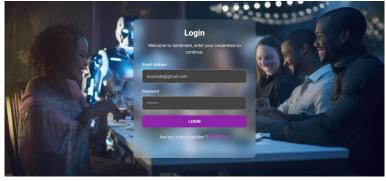
Conduct final testing & debugging

Deploy

Launch system & prepare documentation

# User Interface development







### References

- 1) <a href="https://webrtc.org/getting-started/peer-connections">https://webrtc.org/getting-started/peer-connections</a> WebRTC
- 2)<u>https://platform.openai.com/docs/models/o3-mini</u> openAl 03 mini
- 3)https://socket.io/docs/v4/ Socket.IO
- 4)https://www.drawio.com/ Diagrams
- 5)<u>https://www.joinglyph.com/blog/ai-speech-recognition-is-revolutionizing-market-research</u> Target

Audience

- 6) <a href="https://fireflies.ai/integrations/videoconferencing#integration-listing">https://fireflies.ai/integrations/videoconferencing#integration-listing</a> Fireflies
- 7) <a href="https://learn.microsoft.com/en-us/microsoftteams/platform/bots/how-to/teams-conversational-ai/teams-conversation-ai-overview?tabs=javascript%2Cjavascript1 Teams Al