



AscendPro

An AI Powered Employee Development and Meeting Management Platform



Supervisor: Ayesha butt

team

Adil - 2180103

Humdan – 2080109

Daeyan – 2180121

# Introduction

In today's dynamic corporate landscape, efficient management of meetings, employee development, and task planning is essential for maintaining productivity and fostering growth. Our Final Year Project aims to develop a platform that leverages AI driven tools to help employees of any organization streamline meeting management, identify skill development opportunities, and plan their career growth effectively. The platform integrates audio analysis, natural language processing, and AI powered recommendations through external APIs, providing a personalized experience tailored to each employee's needs. One of the unique features of our platform is the ability to create personas of colleagues, such as the CEO or supervisor, using API based AI systems to analyze their personality traits. This allows users to simulate interactions and practice effective relationship management strategies.

# Aims & Objectives

Aims:

1. To develop an AI powered platform that helps employees manage meetings, plan their professional development, and achieve goals efficiently.

2. To provide tools such as meeting summaries, employee personas, skill roadmaps, and content recommendations by leveraging external APIs.

3. To create a system that integrates various AI based APIs to analyze meeting audio and provide relevant insights.

4. To introduce an AI driven colleague persona feature, powered by external APIs, that helps users simulate interactions and practice relationship building strategies.  
  
Objectives:

1. Develop a platform that provides tools like meeting summaries, employee personas, skill roadmaps, and content recommendations by utilizing external APIs.

2. Integrate external APIs for audio analysis and real-time meeting recording to summarize and analyze discussions.

3. Build an NLP based meeting scheduler that integrates with existing employee data.

4. Utilize AI based APIs for skill development recommendations based on individual skill levels.

5. Introduce an AI powered persona feature that helps users simulate interactions and practice relationship building strategies.

6. Create a user friendly interface with both dark and light theme options to enhance user experience.

# Problem Statement

In many organizations, employees face challenges managing meetings, advancing their skill sets, and improving their relationships with colleagues and superiors. Manual handling of these tasks often leads to inefficiencies, missed opportunities, and difficulties in navigating workplace dynamics. Without personalized guidance, employees may struggle to foster effective relationships with supervisors or colleagues. Our platform addresses these challenges by automating meeting summarization and scheduling, as well as providing AI driven insights for skill development and interpersonal relationship enhancement. The platform allows employees to simulate interactions with AI generated personas in a risk free environment, improving their interpersonal skills.

# Methodology

1. Frontend Development (React.js / Next.js): Build a responsive, interactive web interface using React.js. Implement dynamic themes (dark and light modes) and design user friendly pages for managing meetings, skill tracking, AI persona simulations, and personalized content recommendations.  
  
2. Backend Development (Python): Develop a Python backend to handle API requests and manage user data. Create endpoints for real time meeting analysis, persona creation, and skill recommendation services using APIs. Ensure secure user authentication and authorization.  
  
3. Database Management (MongoDB): Utilize MongoDB for flexible data management, handling user personas, meeting archives, and AI generated roadmaps. Store and retrieve meeting summaries, skill development data, and AI created personas.  
  
4. API Integration: Leverage external APIs for audio analysis, meeting summarization, NLP based meeting scheduling, skill development recommendations, and AI driven persona simulations.

# Project Scope

The proposed platform is targeted at middle aged employees working in various organizations. The solution will enable users to efficiently manage meetings, track their skills, improve relationships with colleagues, and plan career growth. Features like AI generated personas of colleagues and superiors will help employees simulate interactions and practice relationship building strategies.

# Feasibility Study

Risks Involved:

* API Reliability: Reliance on external APIs introduces a dependency on third party providers. To mitigate this, we will select reliable services and implement fallback solutions in case of outages.
* Persona Simulation Accuracy: External APIs may have limitations in simulating personalities accurately. We will focus on refining user inputs to improve the accuracy of persona models.
* User Engagement: Encouraging regular use of AI personas may be challenging. We plan to integrate this feature seamlessly into daily workflows and guide users on how to utilize it effectively.

Resource Constraints:

1. Time and Personnel: Limited time and development resources may impact project delivery. We will prioritize core features such as meeting management and persona creation.

2. API Costs: Some APIs have associated costs for advanced features. We will optimize usage to minimize expenses while delivering high quality features.

# Solution Application Areas

1. Corporate Enterprises: The platform will enhance meeting management, skill development, and performance tracking within large companies.

2. Persona Simulation & Relationship Building: Employees can use AI generated personas to practice interactions and improve workplace relationships.

3. Skill Development: Employees can plan their learning paths using AI generated roadmaps, accelerating career growth.

4. Meeting Management: Automate meeting summaries and minutes to save time and increase productivity.

# Tools/Technology

* Frontend: React.js / Next.js for creating interactive user interfaces and functionality.
* Backend: Python for server side logic and API integrations and use to serve REST API.
* Database: MongoDB for scalable data management.
* API Integrations: External APIs for AI driven meeting summarization, persona simulation, skill recommendations, and speaker identification.

# Team Expertise

1. Adil (Full Stack Developer): Responsible for designing an intuitive user interface using React.js and developing features such as theme selection.
2. Daeyan (Backend Developer): Manages backend development using Next.js, ensuring secure authentication and seamless API integrations and data connectivity.
3. Humdan (API Integration Expert): Handles integration of external APIs for meeting summarization, persona simulation, and skill recommendations, optimizing API usage and managing associated costs.

# Milestones

Month 1: Planning and Research  
- Define project objectives and scope.  
- Conduct research on API based solutions for meeting management, skill development, and persona simulation.  
Month 2: Requirement Analysis  
- Document user requirements and develop use cases.  
Months 3-4: Frontend & Backend Development  
- Begin development of frontend and backend.  
- Implement user registration, meeting management, and skill tracking features.  
Months 5-6: API Integration  
- Integrate APIs for meeting summarization, persona creation, and skill recommendations.  
- Test and refine API based features.  
Month 7: Testing & Feedback  
- Conduct user testing and refine features based on feedback.  
Month 8: Final Documentation & Presentation  
- Complete documentation and present the platform to stakeholders.

# References

1. Delve.ai
2. React.js Documentation: <https://reactjs.org>
3. React.js Documentation: <https://nextjs.org/>
4. MongoDB Documentation: <https://www.mongodb.com>
5. OpenAi API Documentation: https://openai.com/index/openai-api/
6. Gemini API Documentation: https://ai.google.dev/