Technical Project Proposal for Peerwell AI-driven Peer-Learning Platform MVP

Executive Summary

This proposal outlines the development of Peerwell's AI-powered peer-learning MVP, automating peer-learning sessions with emotional intelligence discussions. The platform integrates Recall.ai for video conferencing, OpenAI's GPT-4 for chatbot facilitation, Airtable for user management, Doodle for scheduling, and Zapier/Make for workflow automation. The MVP eliminates the need for custom interfaces, focusing on automating key processes and creating a streamlined user experience.

Objective

- Develop a no-UI MVP for automated peer-learning sessions.
- Facilitate group discussions with an AI chatbot using OpenAI GPT-4.
- Automate meeting scheduling, participation, transcription, and follow-ups using Recall.ai and Zapier/Make.

Tech Stack

Component	Technology	Purpose
Programming Language	Python	Scripts for bot configuration, APIs, and automation logic.
Data Management	Airtable	Manage user data, groups, and session details.
Scheduling	Doodle + Zapier/Make	Automate scheduling and meeting invitations.
Video Conferencing	Zoom/Google Meet + Recall.ai	Automate bot participation and transcription.
Chatbot	OpenAI GPT-4	Facilitate peer-learning discussions dynamically.
Automation	Zapier or Make	Integrate Airtable, Doodle, Gmail, and feedback workflows.

API Integrations	Recall.ai + Zoom API	Manage video conferencing and real-time interaction.
Feedback Collection	Typeform/Google Forms	Gather participant feedback post-session.

System Architecture Overview

1. **User Registration & Group Assignment:** Use Airtable to collect user data, with admins assigning groups manually.
2. **Scheduling:** Doodle polls allow participants to coordinate meeting times.
3. **Video Conferencing:** Recall.ai manages the chatbot's entry and transcription in Zoom/Google Meet.
4. **Chatbot Facilitation:** GPT-4 guides discussions using real-time input.
5. **Post-Session Summary & Feedback:** Automated follow-ups and feedback collection using Recall.ai and Zapier/Make.

Development Plan & Milestones

Phase	Timeline	Deliverables
Phase 1: Setup & Configuration	Week 1-2	Airtable form, Doodle poll, basic automation.
Phase 2: Recall.ai Integration	Week 3-4	Bot joins meetings and transcription working.
Phase 3: Chatbot Development	Week 5-6	GPT-4 chatbot with predefined scripts integrated.
Phase 4: Post-Session Workflow	Week 7	Automated summaries and feedback forms.
Phase 5: Testing & QA	Week 8	End-to-end testing and adjustments.

Development Tools & Setup

- **Python Environment:** Set up virtual environment for development.
- **API Keys:** Secure API keys for Recall.ai, OpenAI, and Zoom/Google Meet.
- **Version Control:** Use GitHub/GitLab for collaborative development.

- **CI/CD Pipeline:** Implement GitHub Actions for automated testing.

Timeline & Milestones

Estimated project duration: **8 weeks**.
Completion by end of Week 8 with full end-to-end testing.

Risks & Mitigation Strategies

Risk	Mitigation Strategy
Bot fails to join meetings on time	Pre-session checks using Recall.ai monitoring.
Real-time transcription errors	Implement fallback logic for chatbot responses.
Scheduling conflicts	Send reminders using Doodle and Gmail.
Chatbot engagement issues	Monitor test sessions and adjust scripts.

Conclusion

This project proposal outlines the development of a minimal viable product (MVP) for Peerwell's peer-learning platform. The focus is on streamlining operations with Recall.ai, GPT-4, and Zapier/Make. The project aims to deliver the MVP within 8 weeks, with a total budget of $3800 to $4000. This lean approach ensures efficient delivery and validation, with the possibility of scaling in future iterations.