

Project Title:

Mood Garden

Team Members:

Bobby Barsh

Alejandra Juarez Carpio

Christian Madrid

Product Description:

MoodGarden is a student-focused social wellness application designed to help users track their daily moods and receive simple, supportive guidance. Users can log how they are feeling using text entries, emojis, or sliders, and the system uses basic AI sentiment analysis to identify emotional patterns. Based on these inputs, the app provides non-clinical suggestions such as grounding exercises, journaling prompts, and positive affirmations. MoodGarden is intended to support emotional awareness and self-reflection, not to diagnose or treat mental health conditions.

Scope:**Core Features****Mood Logging:**

Users can record their current mood using simple inputs (text, emoji, or sliders).

AI-Assisted Mood Insights:

The system uses basic sentiment analysis or classification to interpret user mood entries and provide supportive feedback.

Personalized Recommendations:

The app offers gentle, non-clinical suggestions such as grounding exercises, journaling prompts, or positive quotes.

User Dashboard:

Displays recent mood entries, trends, and simple visualizations.

Secure Backend:

Database for storing user entries, timestamps, and AI outputs.

Backend API endpoints for mood submission, retrieval, and AI integration.

Frontend Interface:

Clean, simple UI for logging moods, viewing insights, and navigating the app.

What new tool technology do you expect to learn?:

We expect to learn how to integrate AI and sentiment analysis tools into a real-world application, along with improving our skills in full-stack development using modern frameworks like React and backend APIs.

Risks:

The main risks of MoodGarden include limitations in AI accuracy when interpreting user emotions, which could result in vague or less helpful feedback. There is also a risk of users relying too heavily on the app for emotional support instead of seeking professional help when needed. Data privacy and security are important concerns since the app handles sensitive mood data, requiring careful backend protection. Additionally, time constraints, API limitations, and integration challenges between the frontend, backend, and AI components could impact development and overall system reliability.

Timeline/Milestones:**Phase 1: Project Initiation & Planning**

Jan 12 – Jan 19

- Team formation & project selection
- GitHub setup and meeting schedule
- Statement of Work (SOW) – Due Jan 12
- Work Breakdown Structure (WBS) – Due Jan 19

Phase 2: Requirements & Design

Jan 26 – Feb 16

- Requirements engineering & analysis
- Use cases, UML, ERD, acceptance test cases
- Software Requirements Specification (SRS) – Due Jan 26
- Software Design Document (SDD Part 1) – Due Feb 2
- Software Design Document (SDD Part 2) – Due Feb 9
- Integration & testing plans completed by Feb 16

Phase 3: Midterm Review

Feb 23 – Mar 2

- Midterm Group Report & Presentation – Due Feb 23
- Iteration-1 product demo
- Individual Midterm Report & Presentation – Due Mar 2

Phase 4: Implementation & Iterations

Mar 16 – Apr 13

- Core feature implementation
- Backend, frontend, and AI integration
- Iterative development with demos:
 - Iteration-2 Demo – Mar 23
 - Iteration-3 Demo – Mar 30
 - Iteration-4 Demo – Apr 6
 - Iteration-5 Demo – Apr 13

Phase 5: Testing & Final Delivery

Apr 20 – May 1

- System testing & bug fixes
- Final product demonstration
- Final Group Presentation – Apr 20 & Apr 27

Final Deliverables Due May 1:

Final group report

- Final program & GitHub repository
- User manual and product files
- Individual report, slides, and presentation

Project Completion

May 4 – May 8

- Individual presentations
- Course wrap-up and evaluation

Meeting Schedule:

Tuesdays at 5:30-6:30 pm

GitHub Account:

github.com/madridcm010/MoodGarden