



Mood Tracker App

SPECIFICATION DOCUMENT

Mobile Application Development for Android

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Topic: Principles of Ergonomics, Material You, and Accessibility

App name: Mood Tracker



I – Project Overview

The Mood Tracker application was designed to illustrate a presentation on the importance of user experience/user interface (UX/UI) while being ergonomic, accessible and using Material You. Its goal is to help users record and visualize their emotions throughout the day in an intuitive, aesthetic, and accessible way.

The app allows users to:

- Select one of 12 emotions represented by emojis and color-coded buttons.
- Add an optional comment to express their current mood.
- See a list of mood cards stored locally and organized by date and time.
- Visualize daily moods, calendar history, and weekly statistics.

II – Final Version Features

The final version of the Mood Tracker app is structured around three main screens: Home, Calendar, and Statistics, accessible via a bottom navigation bar. Each screen follows consistent spacing, color hierarchy, and touch interaction standards to ensure comfort and clarity during use.

A – HOME SCREEEN

The Home Screen is the emotional core of the application. It allows users to record their current mood through a simple, colorful interface composed of twelve emotion buttons arranged in a 4x3 grid.

Each button features an emoji and a descriptive label, using specific colors to visually distinguish between emotional states.

This design supports fast recognition, low cognitive load, and an enjoyable user experience.

List of the 12 emotions:

- 😊 Joy
- 😍 Love
- 😌 Calm
- 😢 Sad
- 😡 Angry
- 😱 Fear
- 😴 Bored



- 🤢 Disgust
- 🥱 Embarrassed
- 😰 Anxiety
- 😊 Nostalgia
- 😎 Pride

When a user taps an emotion, the button briefly animates with a bounce effect to provide tactile feedback and emphasize the action.

A comment input field is available below, enabling users to express their thoughts or describe the context of their mood.

The information (emotion, comment, timestamp) is stored locally using Room Database, ensuring persistence even after restarting the application.

Each saved mood is displayed as a Mood Card, showing:

- The selected emoji and its label.
- The user's comment.
- The exact time the mood was recorded (in 24-hour format).
- A background color corresponding to the emotion type.

Mood Tracker 😊

2025-11-10

Joy Sad Angry

Fear Love Disgust

Anxiety Embarrass Tired

Nostalgia Envy Bored

Add a comment about your mood

Add Mood

Fear
I hope I will finish 10:24

Sad
I want to test 10:24

Love

Home Calendar Stats

The entire screen maintains a calm and soft visual environment through a consistent background image, large touch zones, and readable typography aligned with Material Design 3 guidelines.



B – CALENDAR SCREEN

The Calendar Screen enables users to view and revisit their past moods. It presents a monthly calendar layout with all days of the current month, highlighting those that contain recorded moods. When the user selects a day, the application filters the database and displays all moods associated with that date in a scrollable list.

This screen is designed for clarity and ease of navigation:

- Days with moods are lightly shaded in blue.
- The selected date appears in a more intense color for focus.
- A clear empty state message appears when no moods are recorded on a specific date, reducing confusion and improving feedback consistency.
- The background remains the same soft gradient image, maintaining visual continuity across all screens.

November 2025

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

2025-11-10

Fear
I hope I will finish 10:24

Sad
I want to test 10:24

Love
This app is beautiful ! 10:23

Home **Calendar** **Stats**



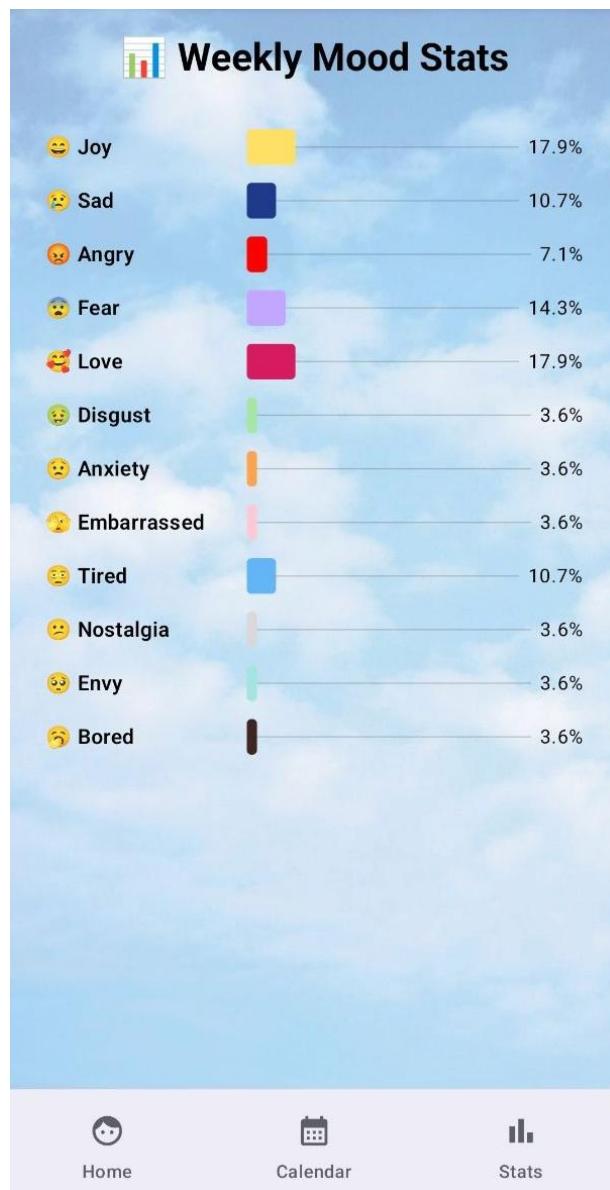
C – STATISTICS SCREEN

The Statistics Screen provides an overview of the user's emotional trends throughout the week. It calculates the proportion of each emotion recorded over the past seven days and represents the data as a horizontal bar chart. Each bar's color corresponds to the emotion's color theme, creating visual coherence across the interface. This feature helps users reflect on their emotional patterns and identify recurring feelings.

The screen includes:

- Emotion names and emojis on the left for quick identification.
- Percentage values displayed at the end of each bar.
- A neutral reference line at 50% for easy comparison.
- A placeholder empty state when no data is available for the week.

The entire chart dynamically adapts to system themes using Material You dynamic colors, ensuring it looks consistent with the user's device palette.





D – ACCESSIBILITY FEATURES

Accessibility was implemented as a key design pillar of the final version.

All icons and images include meaningful contentDescription attributes to support screen readers such as TalkBack. Text contrast ratios follow WCAG guidelines, ensuring that all labels remain legible in both light and dark modes. Additionally, the touch targets for emotion buttons and navigation items meet the minimum 48dp size recommendation for comfortable use.

These adjustments ensure the app remains usable for all audiences, including those with visual or motor impairments.

E – VISUAL AND UX ENHANCEMENTS

To create a pleasant first impression, the final version includes a custom splash screen and a personalized app icon, maintaining the emotional and friendly tone of the interface.

The app leverages Material You theming to synchronize with the device's wallpaper colors, adapting to user preferences automatically on Android 12 and above. Rounded corners, soft elevation, and consistent spacing provide a feeling of balance and modernity, while animated button interactions add subtle personality without overwhelming the experience.

Overall, this version of Mood Tracker offers a coherent, elegant, and ergonomic environment where users can easily record, reflect on, and visualize their moods through both functional and aesthetic design principles.

III – Design Rationale

A – UX & ERGONOMICS

The interface was designed following ergonomic principles:

- Direct manipulation: emotions are represented by large, colorful buttons.
- Low cognitive load: few visible actions per screen, intuitive layout.
- Consistency: same visual language and component spacing throughout.
- Feedback: animations and visual responses confirm interactions.
- Readability: clear typography, spacing, and text alignment.



B – ACCESSIBILITY

Accessibility was prioritized to ensure inclusivity:

- Screen readers can announce navigation items and emotions.
- Text contrast was tested against Material Design accessibility standards.
- Simple empty states prevent confusion when data is missing.

C – MATERIAL YOU INTEGRATION

Material You provides system-driven customization:

- Colors dynamically adapt to user preferences (Android 12+).
- Typography and elevation follow Material 3 guidelines.
- Components (buttons, inputs, cards) maintain a cohesive aesthetic.

IV – Unfinished Version (Public GitHub exercise)

A – OBJECTIVE

A simplified, unfinished version of the project was created for classmates to complete as a practical UX/UI exercise. This version focuses on understanding ergonomic design, accessibility, and Material You integration.

B – WHAT'S INCLUDED?

- Navigation between the three screens (Home, Calendar, Stats).
- Room database and ViewModel are present but not fully connected.
- Layouts display placeholder components and TODO comments indicating missing parts.
- Consistent use of Material 3 and dynamic theming structure.

C - WHAT STUDENTS MUST COMPLETE

Each screen includes TODO sections in code such as:

- // TODO: Display moods from database
- // TODO: Add empty state illustration
- // TODO: Implement weekly statistics chart
- // TODO: Apply accessible color contrast



Expected work:

- Improve HomeScreen interaction (mood selection, persistence).
- Design and implement CalendarScreen layout for date-based display.
- Create a StatsScreen with a simple graph (bar/pie).
- Add or improve accessibility and visual feedback (color contrast, TalkBack, motion).

V – Repository and Deliverables

The public GitHub repository contains the unfinished version of the Mood Tracker project, which has been specifically prepared as an exercise for other students.

The repository also contains:

- A PowerPoint presentation summarizing the project and the design approach.
- A screenshots folder showing both the unfinished version (available publicly) and the final version (submitted privately on Moodle).

 GitHub repository link:

https://github.com/alixakela/II.3510_2526_Skills_G1_UXUI_for_Mobile_MoodTracker/tree/main

