**Final Report**

**MindMate App**

**Github Link:** <https://github.com/adinashby-vanier-college/app-dev-2-project-mindmate.git>

*Project Aim and Description*

MindMate is a mobile wellness application built using Flutter with Firebase Authentication.

Its goal is to help users maintain positive mental health through daily quotes, mood tracking, affirmations, breathing exercises, and a personal journal.

The app provides:

* A motivational quote of the day.
* A simple way to log mood alongside quotes.
* A journal to record daily thoughts and review past moods.
* Affirmations fetched from an external API.
* A guided breathing timer to encourage relaxation.
* Secure login and registration with Firebase.
* A Profile section for basic user info.

*Functional Requirements*

Authentication - Users can register/login securely with Firebase (email & password).

Quote of the Day - Fetches random quotes from ZenQuotes API and allows users to log mood.

Journal - Users can add, view, and manage journal entries alongside mood logs.

Affirmations - Retrieves positive affirmations from Affirmations.dev API.

Breathing Timer -  Implements a guided 4-4-6 loop (inhale–hold–exhale) with countdown.

Profile Screen – Allows users to add and view their profile details.

Navigation Flow – All features are accessible via the Home Dashboard.

*Non-Functional Requirements*

Usability - Clean and intuitive interface for ease of use.

Performance - Responsive UI, lightweight, and fast loading.

Reliability - Works consistently on emulators.

Security - User authentication with Firebase to protect account data.

Maintainability - Modularized code with screens and services in separate files.

*User Stories*

As a user, I want to log in securely so that I can access my personal data.

As a user, I want to see a motivational quote each day so that I start positively.

As a user, I want to log my mood so I can track my mental state over time.

As a user, I want to write journal entries so I can reflect on my experiences.

As a user, I want to read affirmations so that I can stay motivated.

As a user, I want to practice breathing exercises so I can relax and reduce stress.

As a user, I want a profile page so I can personalize my app experience.

*Test Cases*

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature** | **Test Case** | **Expected Result** | **Pass/Fail** |
| Authentication | Register new user with valid email & password | Account created and login successful | Pass |
| Authentication | Login with incorrect credentials | Error message shown, access denied | Pass |
| Quote API | Fetch quote from ZenQuotes API | Quote and author displayed correctly | Pass |
| Mood Log | Log mood after reading quote | Confirmation shown, mood saved | Pass |
| Journal | Add new journal entry | Entry appears in list of journal entries | Pass |
| Affirmations API | Fetch affirmations from API | Affirmation text displayed on screen | Pass |
| Breathing Timer | Start timer | Breathing cycle countdown (inhale–hold–exhale) visible | Pass |
| Breathing Timer | Stop timer | Timer stops, screen resets to "Tap Start to Begin" | Pass |
| Navigation Flow | Access each feature from Home dashboard | Correct screen opens without error | Pass |
| Profile | Add/update profile details | Profile details saved and displayed correctly | Pass |

*Roles & Responsibilities*

**Kristina:**

App Design

Implemented Quote of the Day screen (API fetch + mood log).

Built Breathing Timer screen with looping 4-4-6 countdown.

Implemented Affirmations screen with API integration.

**Alde:**

Set up Authentication service with Firebase.

Implemented Journal screen with mood log history.

Designed and coded Profile screen.

Managed UI flow, navigation, and testing.

**Both:**

Shared responsibility for GitHub commits, debugging, and final testing.