Development of a mobile application for anxiety management using Flutter

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Abstract:

This thesis proposal focuses on the development of a mobile application using Flutter, with the aim of managing anxiety and stress. The application will be an emotional support and self-care tool, enabling users to deal autonomously with anxiety and stress situations.
The project will involve user needs research, UX/UI design, implementation of the application's functionality and testing to ensure that the application meets the users' needs.

Idea:

MindEase will be a mobile application designed to offer emotional support and self-care practices. Its functionalities will aim to foster users' mental and emotional well-being, helping them to manage anxiety and stress effectively.

Some of its main functionalities might include:

- Breathing exercises and guided meditation to promote relaxation and reduce stress;
- Virtual Mascot that provides support messages based on the cause of the user's anxiety, offering real-time support;
- Stress monitoring that allows users to track their stress levels over time through daily or periodic recordings to provide intuitive graphical representations;
- Emotion diary to allow users to express their feelings and reflect on their thoughts;
- Tips and suggestions for dealing with stress.

Macro-steps:

1) Search activity and user preferences:
   - Study of Google Trends inherent to anxiety;
   - Writing appropriate questions with the aim of identifying:
     - The major causes of anxiety;
     - How users manage their anxiety;
     - What would help them manage their anxiety;
     - Which features, of those listed above, they find most useful;
     - Which functionalities they would like.
   - Google Form administration;
   - Analysis of the trends and functionalities users find most useful.
2) Documentation writing:
   - Requirements specification (IEEE Standard 830);
   - Requirement engineering, according to MoSCoW criteria;
   - UML modelling;
   - Definition of the architecture.
3) Implementation of the mobile application:
   - User interface design (wireframe and mockup creation);
   - Development of the application functionality;
   - Testing of the application functionality on Android and iOS devices.
4) Completion of documentation:
   - Software quality;
   - Software testing;
   - Software maintenance.