**HealthyEats App Proposa**

HealthyEats is a mobile application developed to support users in monitoring and managing their daily diet. It is designed to provide an intuitive platform where users can record their food intake, analyze their nutritional consumption, and receive personalized dietary recommendations tailored to their needs. By integrating modern technology and user-centric design, the app aspires to promote healthier eating habits and enhance users’ overall quality of life.

The application begins with a simple and accessible registration and login process. Users can create an account or access the app using their email and password, with secure authentication handled through Firebase Authentication. The interface is streamlined to ensure a seamless onboarding experience, reducing barriers for new users.

Once logged in, users can record their daily food consumption with ease. The app allows the input of detailed information, such as the name of the food, quantity, and unit, while leveraging external APIs like USDA FoodData Central to retrieve nutritional information. These records are stored securely in the Firestore database, with the system automatically logging the time and date of each entry. This feature not only simplifies the process of food tracking but also enables users to maintain a consistent record of their dietary habits over time.

HealthyEats takes food logging a step further by offering comprehensive nutritional analysis. Based on the logged data, the app calculates the user’s daily intake of calories, proteins, carbohydrates, and fats. These insights are presented in an easily interpretable visual format, utilizing charts to help users understand their nutritional status at a glance. The analysis process is powered by technologies such as ViewModel and LiveData, ensuring real-time accuracy and reliability.

In addition to tracking and analysis, the app provides personalized dietary recommendations to guide users towards healthier eating patterns. By analyzing users’ food logs, HealthyEats generates tailored suggestions that include recommended food types and portion sizes. This feature empowers users with actionable advice, fostering better dietary choices and long-term health benefits.

The technical architecture of HealthyEats is designed to prioritize both performance and user experience. The app’s front end is developed using Kotlin, creating a smooth and responsive Android application. The backend infrastructure relies on Firebase Authentication for secure user access and external APIs for retrieving detailed nutritional data. User records are managed through the Firestore database, while ViewModel and LiveData ensure efficient state management and data flow. This robust design allows the application to deliver a reliable and enjoyable experience for its users.

By combining practical features with advanced technology, HealthyEats positions itself as a comprehensive tool for diet management. It simplifies the process of food tracking, provides meaningful nutritional insights, and offers actionable dietary advice, making it an invaluable companion for users seeking to improve their eating habits and overall well-being. With its thoughtful design and innovative functionality, HealthyEats represents a significant step forward in personal health management solutions.