Kampus Kit App: ERP-inspired application for college students

Software Requirements Specifications:
Visual Studio Code (IDE), Flutter Framework,
Dart, AVD manager, Figma

Project Guide: Dr. Tanvi Gupta

Members:
Vandit Bhalla
Roll no. 1/19/FET/BCS/126
Eashan Sharma
Roll no. 1/19/FET/BCS/140
Unnati Tyagi
Roll no. 1/19/FET/BCS/155

College Name: Manav Rachna International Institute of Research and Studies

Department: Faculty of Engineering and Technology

Table of Contents

1. Introduction

This project is based on the various college management systems and ERP systems used by universities. It manages the college information, student information, placement information, various different types of event going on in our college. It also keeps track records of all the information regarding students those who are placed in the various organization. It has a notice board which contains information about various cultural or technical or any sports which is supposed to be held soon.

1.1. Purpose

To improve the overall look and feel of the existing college management system while including multiple ease of life features like E-Id card, course resources, interactive campus map and much more.

1.2. Scope

The scope of our project includes the following:

1.2.1. To reduce paperwork
1.2.2. Reduced operational time
1.2.3. Increased accuracy and reliability
1.2.4. Increased operational efficiency
1.2.5. Data security
1.2.6. Reliable information regarding campus placements
1.2.7. To improve the overall look and feel of the existing application
1.2.8. To include ease of life features like E-Id card, student clubs information and enrollment, course resources, interactive campus map and much more
1.2.9. New features can be added as per requirements
1.2.10. To develop a platform for students where they can access the relevant information about themselves and their institution like Attendance, Clubs, College Info, Timetable etc.
1.2.11. To build an application that will be available on all operating systems as it will be built using flutter framework

1.3. References

1.3.1. https://developer.android.com/studio
1.3.2. https://flutter.dev/?gclid=CjwKCAjw46CVBhB1EiwAgy6M4n9S1NctL0 BAMD0Ddy9loXuWSUs-5gKDVBBi7GQ10NqyzRk6ZHP2jxoCm0sQA vD_BwE&gclsrc=aw.ds
1.3.3. https://docs.flutter.dev/
1.3.4. https://code.visualstudio.com/
1.3.5. https://www.javatpoint.com/
1.3.6. https://www.tutorialspoint.com/index.htm

1.3.7. https://www.udemy.com/course/learn-flutter-dart-to-build-ios-android-apps/learn/lecture/14912668#learning-tools

1.3.8. https://dart.dev/

1.3.9. https://youtu.be/F4ptWMYYmrU

1.3.10. https://www.figma.com/files/recent?fuid=1088869950393308809

1.4.   Technologies to be used

1.4.1.   **Visual Studio Code -** Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft for Windows, Linux and macOS. It includes features like support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

1.4.2.   **Flutter Framework -** Flutter is an open-source framework by Google for building beautiful, natively compiled, multi-platform applications from a single codebase.

1.4.3.   **Dart Programming Language -** Dart is a programming language designed for client development, such as for the web and mobile apps. It is developed by Google and can also be used to build server and desktop applications. It is an object-oriented, class-based, garbage-collected language with C-style syntax.

1.4.4.   **Android Studio (AVD manager) -** Android Studio is the official Integrated Development Environment (IDE) for android application development. Android Studio provides more features that enhance our productivity while building Android apps. The avdmanager is a command line tool that allows you to create and manage Android Virtual Devices (AVDs) from the command line. An AVD lets you define the characteristics of an Android handset, Wear OS watch, or Android TV device that you want to simulate in the Android Emulator.

1.4.5.   **Figma -** is a collaborative web application for interface design, with additional offline features enabled by desktop applications for macOS and Windows. The Figma mobile app for Android and iOS allows viewing and interacting with Figma prototypes in real-time on mobile and tablet devices. The feature set of Figma focuses on user interface and user experience design, with an emphasis on real-time collaboration, utilising a variety of vector graphics editor and prototyping tools.

1.5. Overview

Kampus Kit comprises of features and functions that are already present in the existing institution ERPs as well as new services that are not provided on existing platforms. With the help of this app students and faculty members will be able to carry out instructions and task more efficiently and accurately.

2. Overall description

2.1. Working model

2.2. Hardware and Software requirements

2.2.1. Hardware requirements
- A Laptop with Windows/Linux operating System.
- Processor with more 1.7gHz speed.
- Minimum 4gb of Memory.
- Minimum 5gb of empty Storage.
- An Integrated Graphic card.

2.2.2. Software requirements
- Flutter framework
- Dart programming language
- Visual studio code
- AVD manager
- Figma