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Kampus Kit App: ERP-inspired application for college students

Software Requirements Specifications:
PyCharm Community Edition (IDE), Bootstrap Framework,
, Xampp, PhpMyAdmin, Python3, HTML, Flask, Figma

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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. Technologies to be used

1.3.1. **PyCharm Community Edition -** PyCharm is a dedicated Python Integrated Development Environment (IDE) providing a wide range of essential tools for Python developers, tightly integrated to create a

convenient environment for productive Python, web, and data science development.

1.3.2. **Bootstrap Framework -** Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

1.3.3. **Python Programming Language -** Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

1.3.4. **Html -** HTML is an acronym which stands for Hyper Text Markup Language which is used for creating web pages and web applications. HTML is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An HTML document is made of many HTML tags and each HTML tag contains different content.

1.3.5. **Xampp -** XAMPP is one of the widely used cross-platform web servers that helps developers create and test their programs on a local webserver. It was developed by Apache Friends, and its native source code can be revised or modified by the audience. It consists of Apache HTTP Server, MariaDB, and an interpreter for the different programming languages like PHP and Perl. It is available in 11 languages and supported by different platforms such as the IA-32 package of Windows & x64 package of macOS and Linux.

1.3.6. **PhpMyAdmin -** phpMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. phpMyAdmin supports a wide range of operations on MySQL and MariaDB. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.

1.3.7. **Flask -** Flask is a web application framework written in Python. It was developed by Armin Ronacher, who led a team of international Python enthusiasts called Poocco. Flask is based on the Werkzeg WSGI toolkit and the Jinja2 template engine. Both are Pocco projects.

1.3.8. **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.

1.4. 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

- PyCharm Community Edition
- Bootstrap Framework
- Xampp
- PhpMyAdmin
- Python3
- Html
- Flask
- Figma

References

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