



Android Application For AICTE

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ABSTRACT

“**Android App For AICTE**” There are many educational organizations in India which has their website as well as app. This application is mainly for user and admin both. We are developing Mobile App which will provide some of the important and frequently required useful information scholarship, internship workshops etc. The purpose of the project is to develop an android application for the All-India Council for Technical Education website. The application will enable user to access the various features and services offered by AICTE directly from their mobile devices. The project involves the use of various software development tools and techniques to create a user-friendly interface that simplifies. All India council for technical education is responsible for promoting technical education across the country the AICTE website contains important informations about various technical institution, courses, scholarship and other programs. However, accessing this information on mobile device can be cumbersome, as a user need to web browser to navigate the website.

To address this issue, we propose to develop an Android application that provides user with easy access to the AICTE, websites information. Our application will offer more user-friendly experience with a native interface that is optimized for mobile devices. User will be able to access information about different courses and other programs like internships, as well as scholarships opportunities and other important updates. Our mobile will be developed by using latest mobile development tools and technologies, using Java, Android Studio, Firebase and various API's. We ensure that the application is compatible with wide range of devices and provides a seamless experience.

In conclusion, our Android application will make it easier for students, educators, and other stakeholders to access information about technical education in India. By converting the AICTE website into a mobile application, we aim to improve access to important information and promote technical education across the country.

1.Introduction

The All-India Council for Technical Education (AICTE) is a statutory body established by the Government of India to oversee technical education in the country. It is responsible for promoting and coordinating technical education at all levels, from undergraduate to postgraduate and doctoral programs.

With the increasing use of smartphones, mobile applications have become an integral part of our lives. Mobile apps have made it easier for people to access information and services from anywhere and at any time. Therefore, in this project, we aim to convert the AICTE website into an Android application.

The AICTE website provides important information on various technical courses, colleges, and institutes in India. It also provides updates on policy decisions and initiatives taken by the council for the betterment of technical education in the country. However, accessing this information through a website can be time-consuming and inconvenient, especially for students who are always on-the-go.

By developing an Android application for the AICTE website, we aim to provide students with easy access to all the information they need. The app will provide a user-friendly interface that will allow users to browse through different courses and colleges, view information on scholarships and grants, and stay updated on the latest developments in the field of technical education.

In conclusion, converting the AICTE website into an Android application will provide students with a convenient and easy way to access information on technical education in India. The app will provide a user-friendly interface, personalized features, and timely updates, making it an essential tool for students pursuing technical courses in India.

2.Problem Statement

The AICTE website is a valuable resource for students seeking information on technical education in India. However, accessing this information through a website can be time-consuming and inconvenient, especially for students who are always on-the-go. Therefore, the problem statement is to provide students with a convenient and user-friendly way to access the information provided by the AICTE website.

Converting the AICTE website into an Android application can solve this problem by providing students with easy access to all the information they need on-the-go. The application will provide a user-friendly interface, personalized features, and timely updates, making it an essential tool for students pursuing technical courses in India.

Furthermore, the AICTE website provides information on various courses, colleges, and institutes in India, as well as updates on policy decisions and initiatives taken by the council for the betterment of technical education in the country. With the conversion of the website into an Android application, students can access this information at their fingertips, making

it easier for them to make informed decisions about their education.

Therefore, the problem statement is to provide students with a convenient and user-friendly way to access the information provided by the AICTE website, by converting the website into an Android application that is accessible on-the-go.

3. Technologies Used

Java

Java is a widely used programming language that is known for its versatility and scalability, making it an ideal choice as a backend language for web and mobile applications. When it comes to building an Android application from an existing website like AICTE, Java can be used to build a robust and efficient backend.

One of the key advantages of Java is its ability to handle complex computations and large amounts of data, making it ideal for processing and managing the vast amounts of data that an application like AICTE requires. Java's object-oriented programming paradigm also allows developers to build modular and reusable code, which can help streamline development and ensure that the application is maintainable over time.

XML

XML, or eXtensible Markup Language, is a markup language commonly used as a frontend language in Android application development. XML is used to define the user interface (UI) layout of Android applications, allowing developers to create complex layouts that can be easily rendered on different screen sizes and resolutions.

In the case of converting the AICTE website into an Android application, XML can be used to define the layout and structure of the application's user interface. This includes defining the position and size of UI elements like buttons, text fields, and images, as well as specifying the colors, fonts, and other visual properties of the UI.

Firebase

Firebase is a popular mobile and web application development platform that offers a range of services, including a real-time database, cloud storage, authentication, and analytics. Firebase is commonly used as a database language for Android applications, providing a flexible and scalable backend for storing and managing data.

When converting the AICTE website into an Android application, Firebase can be used as the backend database for storing and retrieving data from the application. Firebase's real-time database allows developers to store and sync data in real-time across different devices, making it ideal for applications that require real-time updates and synchronization.

Android Studio

Android Studio is an integrated development environment (IDE) that is specifically designed for developing Android applications. It is based on the IntelliJ IDEA IDE and is the official IDE for Android application development.

When converting the AICTE website into an Android application, Android Studio can be used to build, test, and deploy the application. Android Studio provides a range of tools and features that can help streamline the development process, including a visual layout editor, code editor, debugger, and emulator.

4. IMPLEMENTATION

The app has two main modules - Universal and student. Inside universal we have college and admin sub-module. As a new user we have to signup then we'll enter in the college section, where we have request and data sub-sub module. The college can send requests for approval to AICTE through a request sub-module. Once approved, the colleges can fill in details about themselves in a data sub-module which includes three forms - data1, data2, and data3. Data1 contains vital details about the college such as name, rank, accreditation, and department, while data2 includes more detailed information such as intake, industry support or not, internship, scholarship, and placement details offered by college. Data3 contains a link to the college's website. All of this information is stored in a database and reflected in the student module.

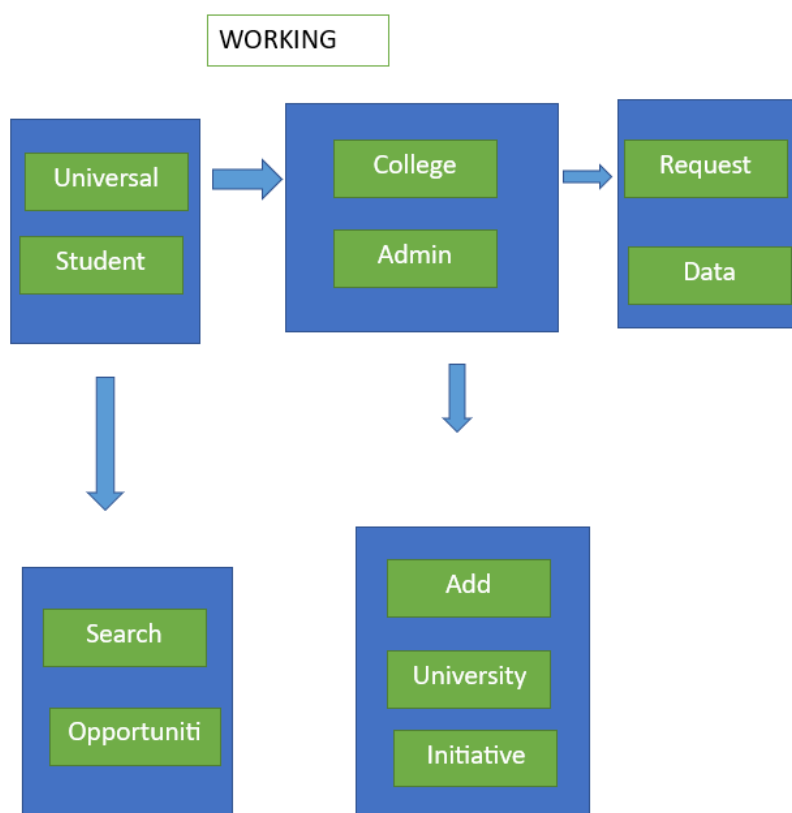
Now the admin module has three sub-modules - add, university, and initiative. In the add sub-module, admin verifies and approves the college name. In the university sub-module, there are three forms named detail1, detail2, and detail3, which are supplied to the college module for filling in the details

about their colleges. Detail1 contains vital details, while detail2 includes more detailed information such as intake, industry support, internship, scholarship, and placement details. Detail3 contains a link to the college's website. All of this information is stored in a database and reflected in the student module. The initiative sub-module allows the admin to enter scholarship, internship, and workshop schemes, these schemes are initiated by the government for student which are also reflected in the student module.

The student module has two sub-modules - search and opportunities. The search sub-module implements a geographical map system that is location-based. Users can enter their current location or search for colleges based on specific filters such as rank and department. The map will show the appropriate colleges, and tapping on a college will bring up a page with basic information such as name, rank, address, year established, and department types. Users can then click on a "more" button to see more details such as intake, clubs, scholarship, placement, and internship details. Finally, there is a button to visit the college's website for further information.

Overall, this app seems to be a comprehensive tool for students to search for colleges, learn more about them, and find opportunities such as scholarships and internships.

5.METHODOLOGY



CONCLUSION

Creating an Android application from scratch can be a challenging task, especially when dealing with complex websites like AICTE. However, by taking on this project, we have demonstrated our skills and knowledge in coding, app development, and website design.

Our application will undoubtedly provide a valuable resource for students, educators, and anyone else interested in the programs and initiatives offered by AICTE. By making the website accessible through a mobile app, you are helping to increase its accessibility and reach, making it easier for people to stay informed and engaged.

We have utilized our app development skills and worked with various tools and technologies. As we are four members in a group, each one of us has knowledge of various tools so, each one of us got to display our skills in building this application.

We encountered with various bugs then we referred different sites and you tube channels for seeking guidance.

Building this project we got to experience real development process of an application. We have gone through the entire process of development from designing to deployment part.

References

Here are some references that can provide more information on the technologies and tools mentioned in this conversation:

Java: <https://www.java.com/>

XML: <https://www.w3schools.com/xml/>

Firebase: <https://firebase.google.com/>

Android Studio: <https://developer.android.com/studio>

Additionally, here are some resources that can help guide the process of converting a website into an Android application

"Convert Website to Android App Tutorial - Step by Step Guide" by Simplified Coding: <https://www.simplifiedcoding.net/convert-website-to-android-app-tutorial/>

"Convert your website into android app using Android Studio" by Atul Yadav: <https://medium.com/@atulyadav22/convert-your-website-into-android-app-using-android-studio-bd84a2f4319c>

"Convert Website to Android App" by Thinkable: <https://docs.thinkable.com/convert-web-to-mobile>.

These references and resources can provide a starting point for developers looking to convert the AICTE website into an application