

Event Management App Using Flutter

Dr. P. Srinivasa Rao ¹, H. Nandha Kumar ², K. Sai Prasad ³, G. Sowsheel ⁴, K. Om Prakash ⁵

¹ Professor and HOD - CSE, JBIET

^{2,3,4,5} Students - CSE, JBIET

Abstract - Every year, a variety of technical and non-technical events take place at college. Keeping track of all of these activities and notifying students about them might be challenging at times. This is made easier with this Event Management app. The app will be able to show all users who have enrolled in the app about the events that organisers have listed. This is a cross-platform app built with Google's Flutter framework, which is a contemporary, powerful, and complex framework. The app is written in the Dart programming language, which is a dynamically typed language. This language has capabilities such as Hot Reload and AOT that are critical for development processes (Ahead of Time Compilation). The Hot Reload functionality allows the developer to observe how the interface is changing without having to reload the entire programme. By pre-compiling the code as the user writes it, AOT (Ahead of Time Compilation) makes the compilation considerably quicker than native Android.

Key Words: App Development, Cross Platform, Flutter, Hot Reload, AOT, JIT.

1. INTRODUCTION

An application that monitors events in any domain (College), may be viewed by registered students and staff, and also provides schedule updates, meetings, and other information. This application's core concept is based on well-organized communication between students and staff. This application is built using the enthralling Flutter platform. Google's Flutter is an open-source, cross platform application development framework that makes development of simple and efficient. You can write code once and have it compiled for various platforms with Flutter. One of the main reasons why developers are enthusiastic about Flutter is because of this feature.

Among Flutter's other advantages are:

- Hot reloading allows you to see updates from code changes right away, as well as create simple and seamless designs and high-performance programmes that can run on low resources.
- Write once, run everywhere – including Android, iOS, Web, Linux, MacOS, Windows and upcoming Fuschsia.

2. IMPLEMENTATION

We noticed that flutter provides many advantages during the development. Google and Apple provide different UI guidelines for developers namely Material and Cupertino. Following these design guidelines make sure that app looks as native as possible. We took a different approach and implemented both of these design rules together that gave us

the output that was best fit for both worlds i.e., iOS and Android.

For the backend purpose, we used a service provided by Google called Firebase. Firebase has features like Realtime Database, App analytics, Cloud Messaging, Authentication and Machine Learning.

Initially student logs into his account and views all the events and their details as published by event coordinators from multiple branches. The students can bookmark these events for later viewing when there are large number of events

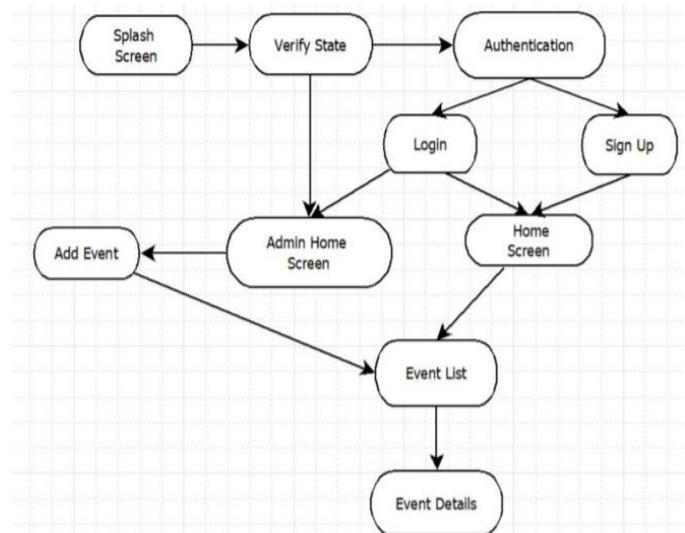


Fig 1: Architecture of app

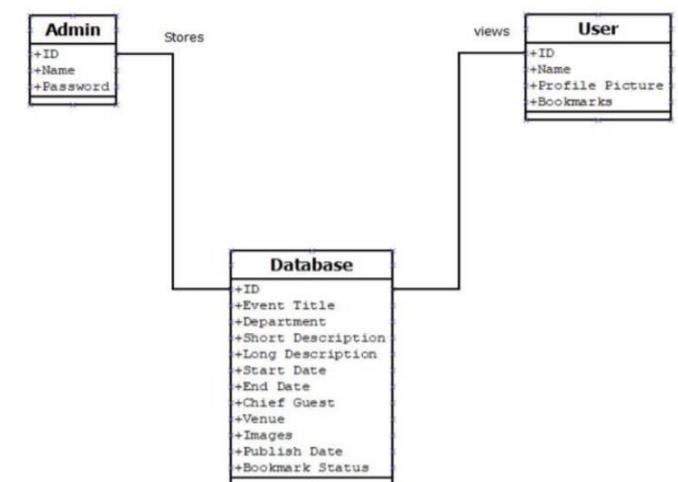


Fig 2: Class Diagram of app

3. CONCLUSIONS

The idea behind the event application is to provide clean and routed communication between the people of that domain. That communication may lead that domain into a better development.

Here the admins can manage an event without stepping out of the room and within a fraction of seconds and the users who are enrolled in this application can choose between a list of events to their Interest the user can select their interested events apart from the group of events by bookmarking them, one of the important feature of this application is that the enrolled candidates can get the notifications whenever the new Event is added, this may skill up the students interest in a particular field of work style.

In the future, edit events can be added as an extra feature along with profile management also, we can increase the scalability of the database in order to serve a large number of users. Options like saving an image, add their view about the event can be added as a feature in the future version

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