**Ashwin Gounder – The Prophecy.**

Documentation for my Mini Project Idea.

**HiCET Edu** – Android App

**Abstract:**

This application provides a way for students to provide basic academic activities through their smartphones instead of approaching the faculties on-premise. Students are facing issues in getting bonafide certificates and other certificates from college due to timing constraints. Students also feel uncomfortable in interacting with faculties regarding subject-related doubts and clarifications. This application enables a transparent medium through which the students can register application for leave, requesting bonafide from college , access their fees data and confirm the rectification of the issues they are facing.

Keywords : Android Programming – Kotlin, Firebase.

**Introduction:**

According to a global study, about 94% of the students use smartphones every hour while they are in College. Keeping this in mind, we wanted to minimize the effort of students on managing their academic activities through their smartphones online.

This Application can help them save their time standing in queue in the students section to request/resolve their queries and help them easily access their academic profile , schedule, events , remainders about finishing work before academic deadlines.

As the smartphone market is only based on two main operating systems - Android and iOS, we decided to develop the app on both platforms only after successful development of the application in the former platform.

Proposed System & Advantages :

HiCET Edu can be installed on any smartphone running on Android 6.0 Marshmallow(API 23) & above and, available to download on Google Play Store.

Students can login into the application using their registered mobile number with OTP.

Session terminates automatically when their sim cards are once changed, which preventing spoofing.

Clutter-free modern UI with Android API 29,even supporting all current and future flagship android smartphones available in the market.

Still under proposal and development , yet to release.☺

**Modules :**

(a) User Module: In this module we are authenticating the  
users by providing user name and password. If user name and  
password is valid then they will be taken to their static screens.  
When they get matched with each other, system checks their  
status and transfer the control to respective user-interface.

(b) Database Module :The system uses MySQL as its database  
and Apache Tomcat Server because of their simplicity and  
flexibility. This module store every single information about  
students, faculty and model their data on specified operations.  
These operation can be storing student attendance, result data  
or can be authentication credentials.  
(c) Staff Module This module is designed for staff , which use  
mobile phone to take attendance, upload result and upload  
college notifications as well as discussion forum. The entered  
admin details are encrypted and sent to server for verification.  
Only after successful authentication the operations are  
performed. If username and password cannot match, he/she can  
enter in to next static screen.

(d) Notification Module: This module allows the department  
HOD to update students about any college related information  
through notifications. The students can view notifications  
provided by the interface provided by application. HOD can  
send message to only available options like all student, all  
faculty, specific faculty and to all.

(e) Discussion Forum Module: This module is a feature where  
students and teachers can discuss the queries from the students.  
This discussion is done with the mobile device via this feature  
and upon any interaction in a particular discussion thread; all  
the users involved in that discussion gets a notification on their  
device .In this discussion forum, the respective subject teachers  
can upload notes, respond to student queries. The student can  
put forth their queries and at the same time upload any notes.

(f) News and Event Service: The news service is for all  
students and staff . As soon as news about the  
university/college is released on the university/college website,  
a notification is sent to all the students and staff .

(g) Assignment and Notes Module : This service is for both  
the staff and students ,however both have diff erent usage of  
the feature. Students - will be able to view the following  
information which is critical about the Assignment and Notes;  
the number of assignments given ,Upon the analysis using this  
data, the system will inform the students if they have got the  
new assignments and notes uploaded by the faculties. Staff -  
will be able to upload the notes helpful for students and the  
new assignments using the mobile device.

(h) Exam Remainder Module : This feature is available for  
the students. They can set remainders for their exams  
accordingly