

Android Based Lecture Application

Prof. Mukesh Chavan¹, Pooja Ambardar², Chaitrali Kumavat³

¹Professor at Dept. Of Computer Engineering, MIT Polytechnic, Pune, Maharashtra, India

^{2,3}Student at Dept. Of Computer Engineering, MIT Polytechnic, Pune, Maharashtra, India

Abstract - Main motive of this app is if the student is not present for the lecture due to some reasons it will be able to provide the notes of lecture to all the students in document format. so the student can easily retrieve the notes. If the teacher is not able to conduct the lecture due to some reasons, then this app provides the way that teacher can submit the notes of previously conducted lectures on topic. Teachers can also upload the previous year question papers and model answer sheet for student practices. So, this app is known as Android Based Lecture App. Also, business schools are exploring new approaches to learning with order to deal with challenges such as increase in class sizes, limited funding support and difficulties in facilitating and encouraging active participation.

Key Words: Android, Assignment, online syllabus, voice recording, SMS

1. INTRODUCTION

The education sector has seen a noticeable increase in educational standards, advancement and innovations in recent years. Schools and other educational institutions have begun to adopt modern teaching methods through interactive intelligent boards, projectors and smart notebooks, etc. And we cannot deny, these technological updates make the education system more interactive and easier. Students prefer to use tablets, phones and other devices to share and transfer study material that saves their time and efforts. On the other hand, this smart technology helps teachers to turn boring lectures into an engaging session. It is not just about sharing information but also creating a better online presentation by avoiding the need to write manually.

1.1 Purpose

Android Based Lecture App's main purpose is to create the appropriate platform for the student for getting the proper notes and their assignment submission. To create the database for students about their assignments and academic works, which helps in their accuracy in grade/remarks. The user-friendly interface where all classroom notes are easily available

1.2 Motivation

The current scenario of covid19 has simulated people to upgrade their skills and turn this unprecedented situation

into an opportunistic one. Amid the coronavirus included lock down people are learning through online classes provided by colleges like google meet, google class room, Microsoft teams, zoom etc. As per the guidelines of the ministry of home affairs, schools and colleges have remained close and many students have started to take their classes from google meet, WebEx meet, smart learning app. In this time of lockdown, without the physical presence of teachers and educators, the online switch can be challenging. One reason for that is the challenge to adapt to new software and technologies and learn to use them. The other challenges to develop focus for search online classes. The Android Based Lecture App is a definitive answer to this problem. The Android Based Lecture App is basically a virtual classroom of sorts.

2. PROPOSED METHODOLOGY

In this project Google voice recorder is used for record voice of teacher and convert it into PDF document and the document is send to students for study. The teacher can also give the assignment on particular topic. The assignment questions is received by students via accounts of students. When we ready for this project we can install this application to teacher's phone/mobile. Then we just need to start voice recording, the recorded voice is converted into PDF

Our entity relationship diagram (ERD) shows the relationships of entity sets stored in the database. An entity in this context is an object, a component of data. These entities can have attributes that define its properties. By defining the entities, their attributes, and showing the relationships between them, this ER diagram illustrates the logical structure of our database. We have the following entities:

1. Teacher
2. Student
3. Admin
4. Notes
5. Assignment Issued
6. Assignment Answered
7. Syllabus.

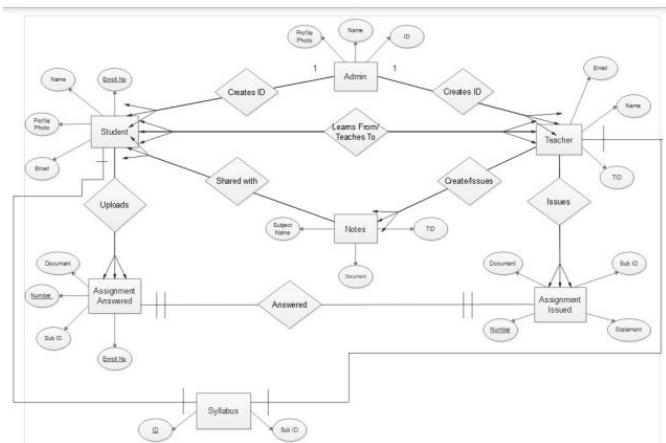


Fig -1: ER Diagram for Lecture App

The notations in between depict the relationships between the Entities. We have eliminated the relationships of entities that are not very important for the sake of simplicity in the diagram. We have used the following notations for relations in entities:

1. One to One: Between Student and Syllabus, Teacher and Student. One Student can only upload one syllabus set (A syllabus set contains multiple subject's syllabus documents.)
2. One to Only One: Between Assignment Answered and Assignment Issued, Assignment Issued and Assignment Answered. One Assignment Question can only have only one Answer of Assignment from One Student, the vice versa is also true.
3. One to Many: Between Admin and Student, Admin and Teacher. One Admin assigns or creates multiple Student and Teacher IDs. These IDs are then used by Teachers and Students to create their respective accounts.
4. Many to Many: Between Teacher and Student. Many Students have Many Teachers. We have used the Rhombus shape or Kite Shape for representing an action between entities.

3. FEATURES

Adaptability: This software is adaptable by all teachers and students.

Availability: This software is freely available to all teachers and students. The availability of the software is easy for everyone.

Maintainability: After the deployment of the project if any error occurs then it can be easily maintained by the software developer.

Reliability: Students and Teachers can be reliable on app for lectures and assignments

User Friendliness: Since, the software is a GUI application; the output generated is much user friendly in its behavior.

Integrity: No unauthorized person can access the app, hence it maintains integrity of software

Security: Users are authenticated using many security phases so reliable security is provided.

Testability: The software will be tested considering all the aspects

4. RESULTS

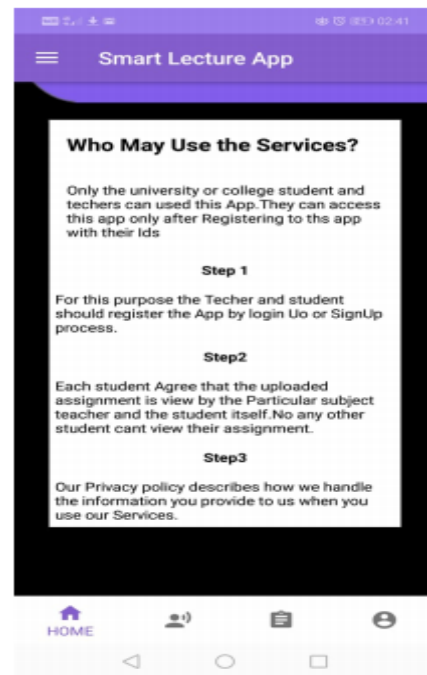


Fig -2: Terms and Services of App

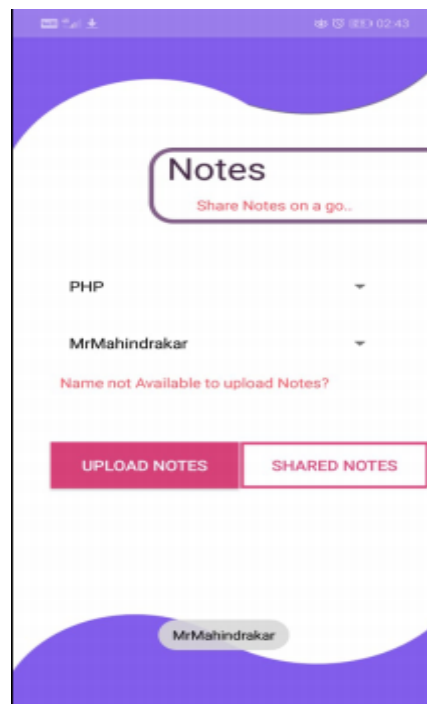


Fig -3: Teachers can upload notes

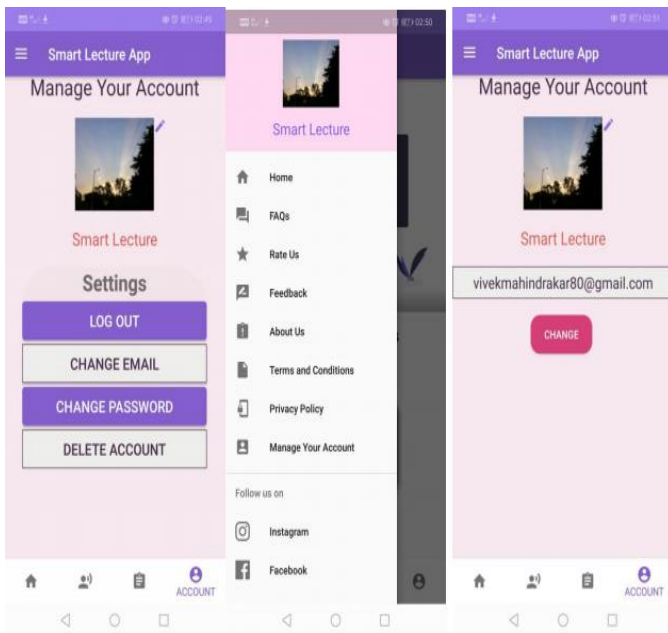


Fig -4: Student Interface

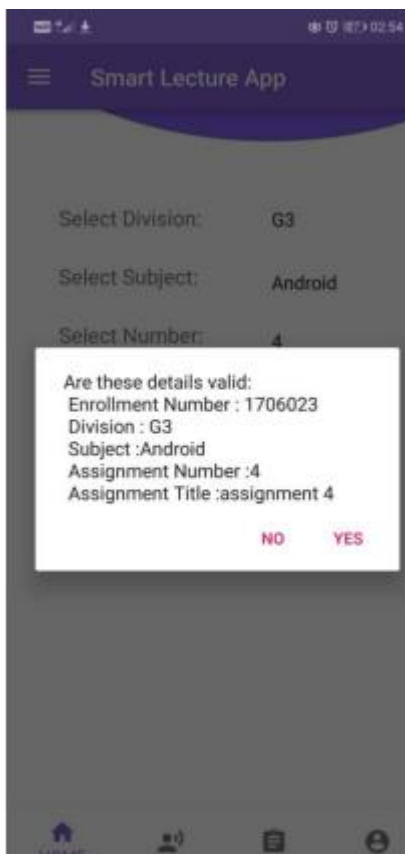


Fig -6: Validation at Client Side

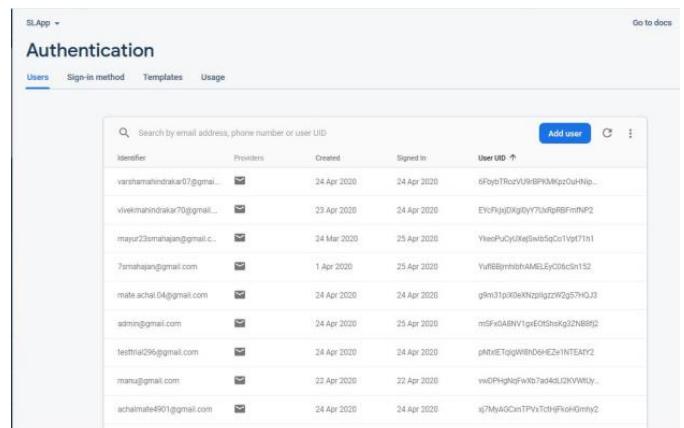


Fig -7: Verification at Admin Panel



Fig-8: User data in admin system

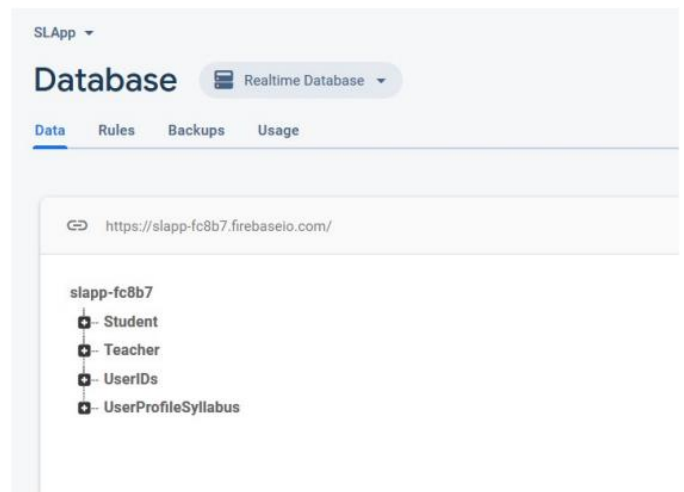


Fig -9: Database for Android Based Lecture App

6. FUTURE SCOPE

In Android Based Lecture App-- mobile application there is scope for improvement of this App. App is not providing the SMS integration. Hence, it can be update and should be able

to give the SMS and email integration. Apart from these there is scope for generating many more features. In the future we can add mock test for students and according to the test teachers can give them a score and students can view result directly. There can be many more future Enhancement & improvement in the Android Based Lecture App

[5] <https://www.canva.com>

[6] <https://www.adobe.com/in/products/xd.html>

[7] <https://www.tutorialspoint.com/android/index.html>

[8] <https://www.stackoverflow.com>

[9] <https://www.youtube.com>

7. CONCLUSIONS

Online Education has brought a positive impact within the lives of scholars and dealing professionals. It has given a chance to require up further courses in conjunction with their studies or job as per their convenience. on-line education has additionally helped the school within the establishments to raise students to review some a part of program on-line that don't need abundant of schoolroom directions. So, the online study helps the faculty to save time in which they can interact with the students more. The quality of education has improved by online courses and even it has become easy for students to refer the content as per their leisure. In the era of medical care, the scope of on-line education will increase even a lot of and can be helpful for college kids, professionals and additionally establishments.

ACKNOWLEDGEMENT

It is our proud privilege and duty to acknowledge the kind of help and guidance received from several people in the preparation of this report. It would not have been possible to prepare this report in this form without their valuable help, cooperation and guidance. First and foremost, we wish to record our sincere gratitude to the Management of this college and to our Respected Principal, for his constant support and encouragement in the preparation of this report and for the availability of library and laboratory facilities needed to prepare this report. Our sincere thanks to Prof. J.P. Khurpade, Head, Department of Computer, MAEER'S MIT POLYTECHNIC, Pune for her valuable suggestions and guidance throughout the preparation of this report. We express our gratitude to our Guide, Prof. Mukesh Chavan for guiding us in investigations of this Project and in carrying out experimental work. Our numerous discussions were extremely helpful. We hold her in esteem for guidance, encouragement and inspiration received from her. Last but not the least we wish to thank our parents for financing our studies and helping us Throughout our life for achieving perfection and excellence. Their personal help in making this Report and project worth presentation is gratefully.

REFERENCES

[1] <https://firebase.google.com/docs>

[2] <https://developer.android.com/design>

[3] <https://developer.android.com>

[4] <https://undraw.co>