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MGR CSE-MOBILE APP FOR STUDENT TEACHER INTERACTION

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Abstract

Nowadays students of our university don't know which Professor is on leave, our Project idea is to provide, Elearning material, lecture videos, and a timetable.

Faculty if they want to leave then it's availed, they come to college and fill leave application form, attendance, result analysis, CAT- I II III. Parents are also able to know student's activities.

To improve all these things, we are making one mobile application by using React-native, CSS, PHP, and SQL, and we connect through the database. We also provide an analysis of the application performance and talk about the limitations of our approach.

Keywords – leave application, attendance, project idea, E-learning material, lecture videos, time-table, result analysis, CAT- I II III, React-native, CSS, PHP, SQL, Performance, limitation

I. INT<mark>RODUCTIO</mark>N

At present time Mobile is a very useful device in which we can get a lot of information related to education, social news, politics etc. In education, the mobile application plays an important role through this we can solve our problems and help us in our work in an easy way. References [1] The author proposed that mobile applications are very helpful for users if any critical work is there it can be easily elaborated on the work, and also focuses on so many sectors such as education at a higher level. References [2] The author discusses the use of mobile applications of GCR in studying the students of computer science engineering students and IT. In a master-level study, it is helpful for many courses like CSE and IT is designed to ensure that students become more familiar with the practical and theoretical parts. References [3,11] The author described that the need of this study was to discuss the use of the mobile application which is focussed on the learning of new English vocabulary and phrases and talk about weakness and strong part of students. Reference [5] in this paper, they developed a new mobile application and analysed all the models of the application and what are all the uses of mobile applications. Reference [9] in this author creates one artificial intelligence base e-learning mobile application that is motivated and helpful for the

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students. Reference [14] describes that in the pandemic period, how students will manage or lose their studies and how AI plays an important role at that time. References [15,16] described that the E-learning mobile application is made up of so many different qualities and properties. There are also limitations of mobile applications in many areas. By references [20] the author was proposing an application for university student guidance called Mobile University Student Guide. It is a mobile application that communicates and connects all the students with university faculty and other members to get information about class schedules, and if any seminar or function is organized by the university, so students get updates about all these things. In references [25] This author discusses the programming logic part for the students many students if they are going to do any project do not have any prior knowledge about the project so they can get easily help from this.

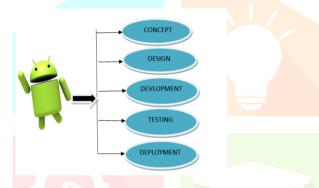


Fig 1.1 General diagram of mobile application

In Fig 1.1, the general diagram of the mobile application shows that our application contains these main components concept, design, development, testing, and deployments.

We used the Android mobile application development concept in this project, which tells us how we implement the rest of the components according to our needs. Using this concept, we design our project by using HTML, and CSS, and by adding some components to make our project more attractive to the user. We use the programming language React-native to give full structure to our project, with the help of PHP, and SQL we connect to the database to store all the information. Manual testing is one of the parts of testing by this we tested our application and finally we deployed our project.

II. LITERATURE SURVEY

- Reference [17] described that this mobile application automatically generates the answer and classifies the question analyzes the result and tracks the performance when on the emotion of the students they detect while providing motivational quotes.
- Reference [18] described that this study offered a new learning technique utilizing the interactive Sirah learning mobile application for students they are read notes and take quizzes to design and develop this mobile application.
- Reference [19] described that This study the application is practical because it contains an attractive educational system in general, students to develop a scientific concept and increase their knowledge.
- Reference [21] described that during the pandemic period, many schools have transformed their education system same in school to an online platform for students its only possible by developing an e-learning mobile application through which students can able to continue their education.
- Reference [22] The author discussed that in this study, engineering students used authoring tools of the mobile app to design an English-learning app, in which English teachers provide feedback for revision and a preliminary cross-disciplinary collaboration is asserted.
- Reference [24] The author described the activity of both the students as well as teachers in mobile apps and how they help in classroom learning.

III. EXISTING SYSTEM

- Parent-Teacher Communication: Some classroom apps facilitate communication between parents and teachers, providing updates on students' progress and behaviour.
- Attendance Tracking: For teachers, some apps include features to manage attendance records and monitor students' attendance.
- Interactive Content and E-Books: Some apps provide interactive educational content, including e-books, videos, and quizzes. These materials often cover a wide range of subjects and are designed to engage students through multimedia elements.

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 Assessment and Feedback: These apps may offer assessment tools, quizzes, and exams to gauge students' understanding of the material. Additionally, they might provide immediate feedback to help students identify areas for improvement.

IV. PROBLEM STATEMENT

- If a faculty is on leave, students do not know which faculty is on leave.
- If a teacher wants to apply for leave, then he has to come to the department's office to apply for leave.
- It is the happiest moment to say that the IT industry is growing rapidly, but it is a fact that some students do not understand coding, how to think about a particular problem, or how to take appropriate steps.
- some students get to do a project in college for the first time, and then they are not able to think about how to do the project or what the project is, they are not able to decide.
- Some students who prepare for exams like college exams, GATE, IIT JAM, etc. Lack of proper notes leads to trouble and this can also be one of the reasons for not qualifying.

V. PROPOSED SYSTEM

Many researchers and developers have developed a variety of mobile applications with different functions for educational purposes. We are going to provide in our application, that students, can easily get e-books, Wellprepared notes by experts, Project-based learning, Attendance, and Lecture videos, which faculty is on leave on a particular day. For Teachers, online leave form, Timetable, and Result analysis. Parents are also able to know student's activity and result performance.

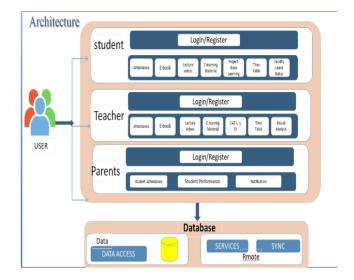


Fig 5.1 Architecture diagram of mobile application

In Fig 5.1 An architecture diagram makes it easier to take in information. They also help with comprehension and recall.

In this architecture diagram of the students, teachers, and parents' components section, each section has a login/register option. The student's section has an ebook, lecture video, timetable, project idea, and faculty leave status. Teachers have access to upload e-books, CAT-I II III, result analysis, leave forms, and attendance. Parents are only able to access students' data so they have received an update of the students. All these are connected through the database in which data can be accessed, services, and sync.

VI. DESCRIPTION

In our mobile application, there were three modules faculty, students, and parents. faculty would be able to apply for leave forms online, resulting from analysis of the students, and upload E-books, learning material, and CAT-I II III scores. Faculty would have access to do modifications in the relative subject. Students could able to know about the status of faculty leave, timetables, E-books, learning material, Project-based learning, lecture videos, and attendance. Access would not be given to any student to do modifications to the app. Parents would be able to know only the activity of students, results, notifications, and attendance but would not have access to modifications in the app.

VII. RESULT AND DISCUSSION

In this mobile application project, students, teachers, and parents will be able to access the information that was mentioned in the esteemed module, accordingly. In this work when we tested the application by giving some user data then our project, the output efficiency of this application was 100% accuracy.

• OUTPUT



Fig 7.2 Screenshot of register and alert section

Here in Fig 7.1 and Fig 7.2, we gave some screenshots of our output of the application.

Fig 7.1, shows the home page of the application which mentions login (with user and password), the register option, by which the user can log in and some details about the founder of our college, HOD.

In Fig 7.2, the registration form for students, teachers and parents shows after filled the registration form, they

are successfully registered and if you enter some wrong details then it shows some pop-up alert message These are some outputs of our application through this user (students, teacher, and parents) will able to access.

• GRAPH REPRESENTATION

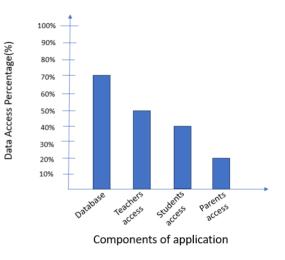


Fig 7.3 Graph representation of an application

In fig 7.3 it shows how much data can be accessed by the components of the application.

The database section stores all the details of the teachers, students, and parents, it contains 70% part of the application. Teachers can access data from the database, which contains 50% of applications. Students and parents both contain 60% but separately contain 40% and 20% respectively. Parents are only able to access students' data and get updates on student activity.

VIII. CONCLUSION

In our project, we conclude that through this app Students will get a lot of help in the field of increasing their skills.

We used React-native, HTML, CSS, SQL, and PHP in the application to make it attractive and responsive.

We also noticed the performance analysis of our project application with limitations which gives 100% accuracy.

Teachers will be able to convey their information to students in a comprehensive manner, in which students can modify their skills in real time. It will be easier for the teacher to apply for leave through this app and get its status approved.

Parents will be able to find information on their child's performance and their updates. Students, teachers, and parents will get help to elaborate on the information easily.

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