

Efficient use of Mobile Apps for Students

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Abstract— Students now a days are dependent on their smart phones for text, email, social media or calling throughout their day. Over fast few years, Mobile learning termed to be M-Learning has the ability to use mobile technology to support teaching, learning and education on mobile phones or tablets. M-learning is enhanced by E-learning allowing students to learn virtually anywhere a mobile signal is available.

Students can communicate and interact with peer students, instructors, and experts without meeting face-to-face, away from the classroom or workplace. These Wireless and mobile technologies enable learning opportunities to learners who do not have direct access to learning in these places. App learning has no time-bounds, it's a relaxed learning. Books are found to be boring for children now a days, which can be replaced with educational apps having colorful pages and moving animations make learning fun to the core.

Mobile apps have the provision of course content to off-campus students, providing feedback to off-campus students, also has provision of student support services ,Student-to-student interactivity and Student to tutor and institution interactivity. Apps have different benefits such as Multimedia content delivery and creation options, decrease in training costs, potentially a more rewarding learning experience and are relatively inexpensive than PCs and laptops.

This paper has a sample demo of a mobile app which helps students to connect to the tutor who is an expert and will be able to provide solution in 10 minutes. The app works with core subjects which students feel uneasy and arise many queries. The user must take a snapshot of the problem through app and post it to the chat. The student is connected to the App with registered tutor and receives the solution. Student also has an option to ask the connected tutor to explain the solution.

At the end of the session student will be given an option to rate the tutor according to the performance. For every solution provided by the tutor, credits ranging from 5-10 will be deducted from student's account. Student can earn these credits by inviting friends which helps students who cannot afford too much money. Tutors will be able to use the app, so that he need not go to the institute to communicate with students online. The app is suitable for those students who are stuck with problems related to their academics.

Keywords-Android App, Tutor, Ratings, Credits, Online Learning

I. INTRODUCTION

Get instant help with your homework and assignments. You are in the right place to ask your doubts regarding your academic subjects. This app connects students and tutors into a single platform to communicate. The app is not limited to a particular region but connects all over India. The App provides online tutoring from class VIII to class XII. The app gives answer to all education board syllabuses throughout India. Our app can be downloaded at free of cost. Registration to this app is free. The tutors who are hired to work with us are highly qualified lecturers and professors. These tutors are well experienced in their subjects. The tutors work on a time to time basis. So that tutor can provide a correct solution to the questions asked by student. Every lecturer has a particular working timings on the subject he is well versed. This android application connects students and tutors and brings them to a single platform. By this way it provides online solution to the student's problems within a certain amount of time. This app is helpful for those who finds difficult to solve problems with their assignment or homework. Student can ask help at any time if he finds difficulty in solving the problem. Student has to take a snapshot of the problem through the camera app. The student initiates the communication by posting the picture on the chat. A particular tutor is selected by looking at the time schedules and problem is assigned to one of them. An acknowledgement is sent to student indicating that tutor is working on the question posted by student. The solution to a specific problem will be given to the student. Student can also get a detailed explanation about the solution from the online tutor. Upon registration the student gets 50 free credits to

communicate with the tutors. Based on the complexity of the problem the credits are deducted on the scale of 5-10. Student can also earn credits by inviting friends who are in his contacts. Another way of earning credits is through payment gateway from respective bank account. Previous session of the user is saved in a separate layout. By this means the previous session and the present session are not overlapped. This helps student to recall the previous study methods and logics more easily from where he learnt from different lecturers. If a student finds that the method used is incorrect in solving problem then he can raise an issue.

Student can request for a test whenever he doesn't feel confident about the subject. The test contains multiple choice type questions with different marks for each question based on the complexity. A particular chapter from the subject can be chosen for test. The marks obtained for particular test is calculated and the results with proper solution for a particular question is displayed. After getting a detailed solution from the tutor, student rates the quality of the session and comments on it. The ratings are on a scale of 1 to 5. This rating helps the tutor to improvise his teaching methodologies. This feedback also helps the admin to calculate the salary to be given to the lecturer according to his performance which is determined by the ratings given by students.

II. LITERATURE REVIEW

The study presented in [3] showed a promising example of teaching through mobile app by integrating various components to create a positive online learning experience. It also shows teaching/learning mobile app design online, can encourage educators to explore and incorporate learning activities in their diverse settings. In the paper[4] indicated that students can use smart phone and utilize their time such that they can continue their education without impacting their work and family life. Smartphone within and without the classroom make it easier for students and teachers to collaborate. In the paper [5], mobile technologies are an attractive and easy means to maintain literacy skills and gain constant access to information. They are affordable, can be easily distributed and thus hold great potential for reaching marginalized groups and providing them with access to further learning and development. Study showed that notebooks, mobile Tablets, iPod touch, and iPads are very popular devices for mobile learning because of their cost and availability of apps.

In recent days educational apps are becoming trendy for students. Many private institutes are developing software applications to attract students to their institutions to make profit. The apps like MathTricks[1], PeriodicTable[2] only post videos about the subject. As mentioned in MathTricks website, the app teaches only mathematical tricks to solve problems faster. The app provides only basic and fun mathematics to students.

The PeriodicTable app is designed only to deal with Chemistry. The app provides videos related to Chemistry and only provides basics about Periodic table. There are only few apps for higher school students that help them. For few apps students will have to pay amount for registering to the app. Initially students have to pay some amount to tutors to get the problems solved. Our app provides extra features than previous similar apps. Like inviting friends to earn credits. Provides daily exercises to students to test his ability whether he can solve a given problem or not. In the existing applications there is no proper communication between the students and personal tutors.

The existing apps don't give much importance to academic syllabus and what student exactly needs. Those apps randomly put some educational videos and to view those videos in random as amount is assigned. To view those tutorials students has to pay at the begin itself. Students are not able to find what they exactly need. For example: A solution to a problem from his text book. Some apps just put some fun games about the subject which is concentrated only for lower section students. Most of the apps don't have an option to chat with personal tutors and also doesn't provide proper information on how to solve the problems related to their subjects.

Limitations

- Students were not able to get proper explanation even though they pay the amount.
- Few apps have voice call facility which is not helping students very much as the students are made to wait for a longer duration.
- Students have to pay more money as they don't get free credits for inviting friends.

III. PROPOSED SYSTEM

The system is mainly concentrated in solving student's academic problems. Student can create a free account by logging with different social network sites. The app can be installed and registered at cost-free. Apart from that our app also gives students 50 free credits for first time installation so that it can be used to check out the app and how the tutors can guide them. The app also has a module which enables student to request for a test to check his confidence levels about a particular topic in the subject. The student sends the snapshot of the problem to the tutor and gets solution for it. Daily questions will be posted in the app to solve.

A. Advantages

The app focuses on student's problems only. Whatever question student asks related to his academics it is solved. This app majorly focuses on core subjects like mathematics, science and social science. It targets students from class 8 to class 10. Student sends picture of a problem and gets the exact solution from the tutor who can deal with. The app works 24X7 for students because students may get a doubt anytime and so he can ask the doubt anytime he feels comfortable. The tutors provide solution within 10 minutes starting from the time of when the question is asked. Student also rates lecturers after the completing the session which will be viewed by the corresponding lecturer to know his performance.

B. Functionalities

Registration:

Student is ought to enrol to the application to pose a question. In this action student must present his personal information to enrol to this instructive application. The registered student information will be protected. Registration is required in order to monitor student's activities by administrator. Student's personal information will be protected all time. Student can likewise enrol with his mobile number in the event if he doesn't wish to enrol with informal organization accounts. While enrolling student must provide his grade and education board information.

Camera:

Student can take a snapshot of the problem and post it in the chat screen.

Chat:

The chat activity helps student to communicate with tutor who is solving the problem and can request for a detailed steps to solve the problem. The student is requested to wait for 10 minutes to solve the problem by the assigned tutor. On the off chance that student doesn't receive response in 10 minutes, and then the problem will be reassigned to another tutor. The reassigning is a warning to tutor loosing credits. In the chat students can likewise request mentor to solve the problem in a specific technique.

Upon completion of solution tutor delivers a picture of solution to student.

Chat History:

The current chat messages are transferred to chat history. The chat history module contains just past discussions between the student and tutor. Toward the end of the session the discussions happened amongst student and tutor is transferred to chat history, so that the following visit wouldn't mistake student for past messages.

Profile:

The profile module displays user's personal information like his name, credit balance, grade i.e., in which class he is studying. This information is fetched from organizational accounts like facebook or gmail.

Add Credits

The add credits module helps users of the app to win or store credits. Through payment gateway student can deposit credits into account from bank account. Student can likewise procure credits by welcoming companions to the application.

Report Issue

Users can help the app improve performance by any means giving feedback if any problems are faced with the app. If app is loading slow or not connecting to the internet then a brief explanation of the problem being faced is explained in the subject of the mail and a report is sent to the app experts. The report provided by app users is investigated by technical experts and app guidance to resolve errors will be provided to the users.

Rate Us

User's participation in rating the app is very important as it helps improve app engagement to reach user's requirement. User participation in ratings helps app to improve the quality of UI design and app performance. These ratings are posted in play store so that anyone who has access to play store can view these ratings before downloading.

FAQ

FAQ contains a set of question and answer about information security, internet banking security when user loads cash into app account. It also contains what security measures user has to take care while using debit card to load cash. A set of question and answer about how to use the app and also earn credits.

Rate Tutor

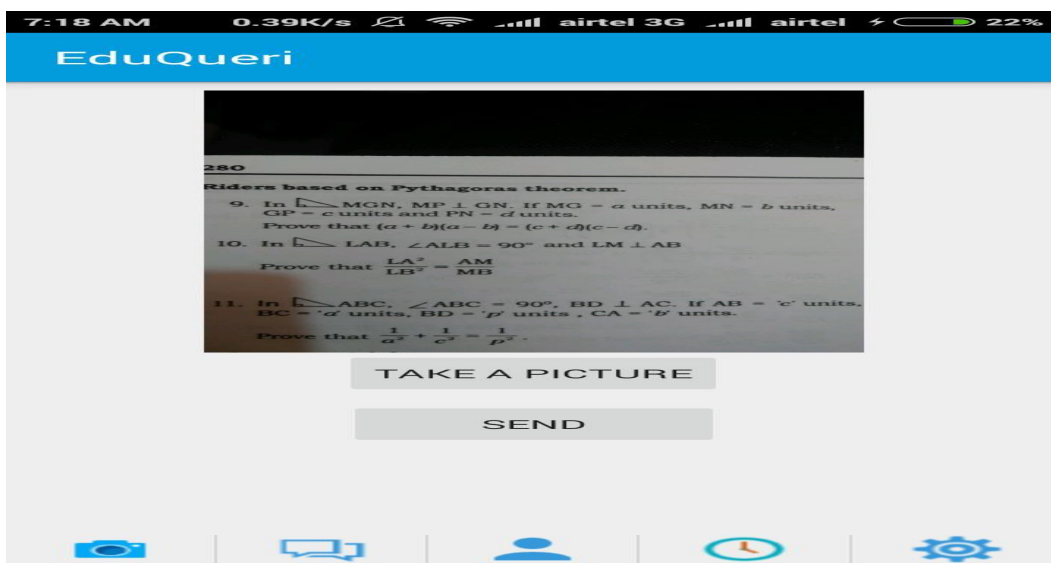
To improve app marketing students are allowed to rate the tutor at the end of session. These ratings are visible to admin of app and also the tutor. User may post rating and write a review about the tutor on a scale of 1-5. It is the tutor's overall rating that determines how his approach was towards solving and explaining the problem.

IV. RESULTS

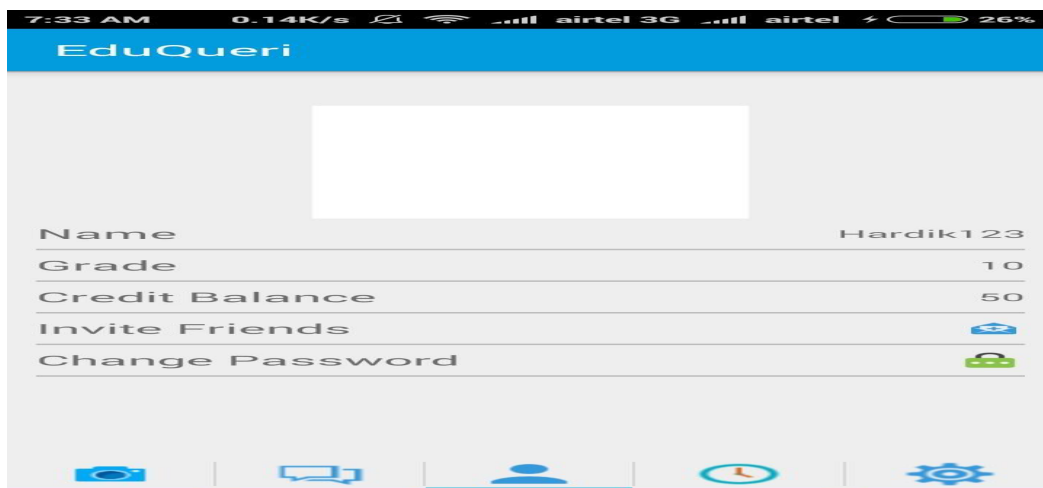
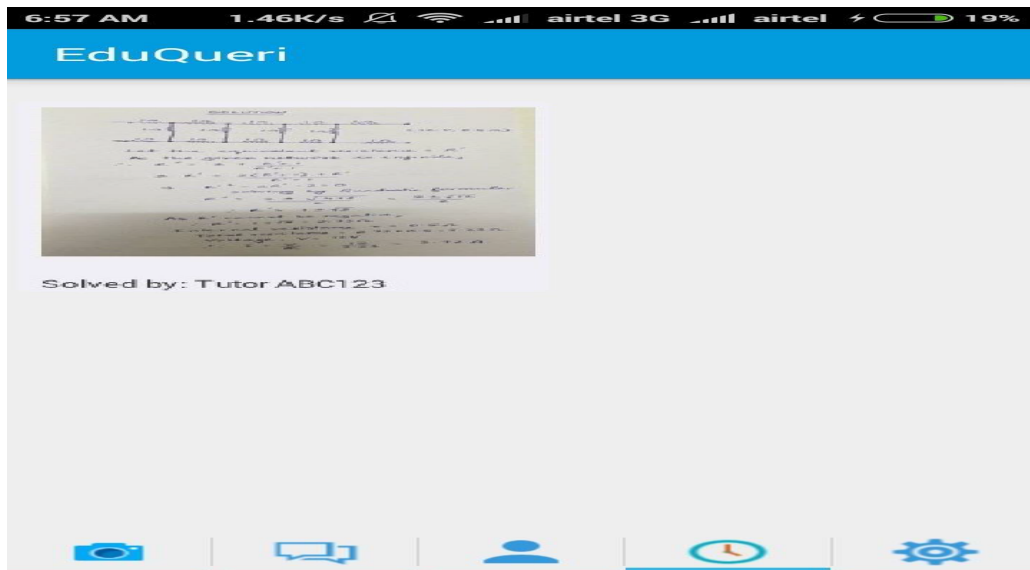
This is Apps registration activity. Student can register with any organizational accounts. Otherwise student can also register with EduQueri account.



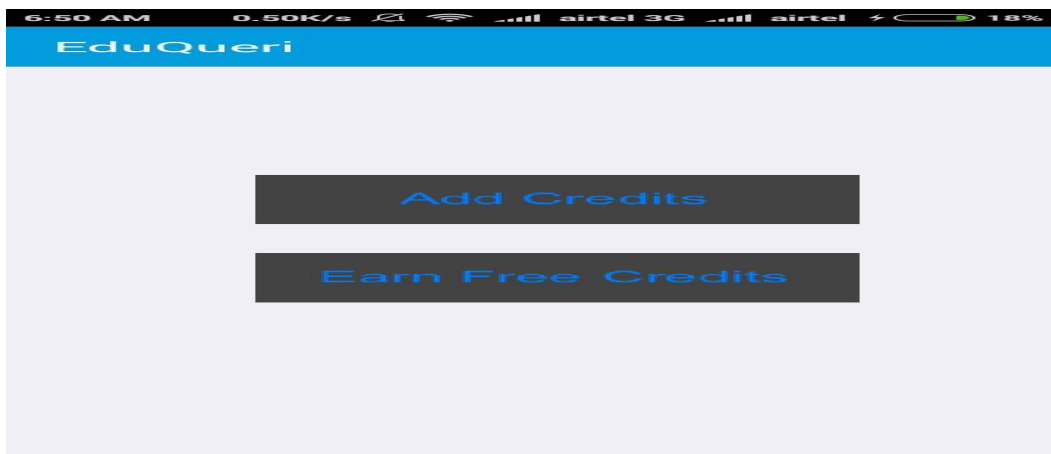
Snapshot of the problem is taken by clicking “TAKE A PICTURE” button. The problem’s snapshot can be posted through send button.



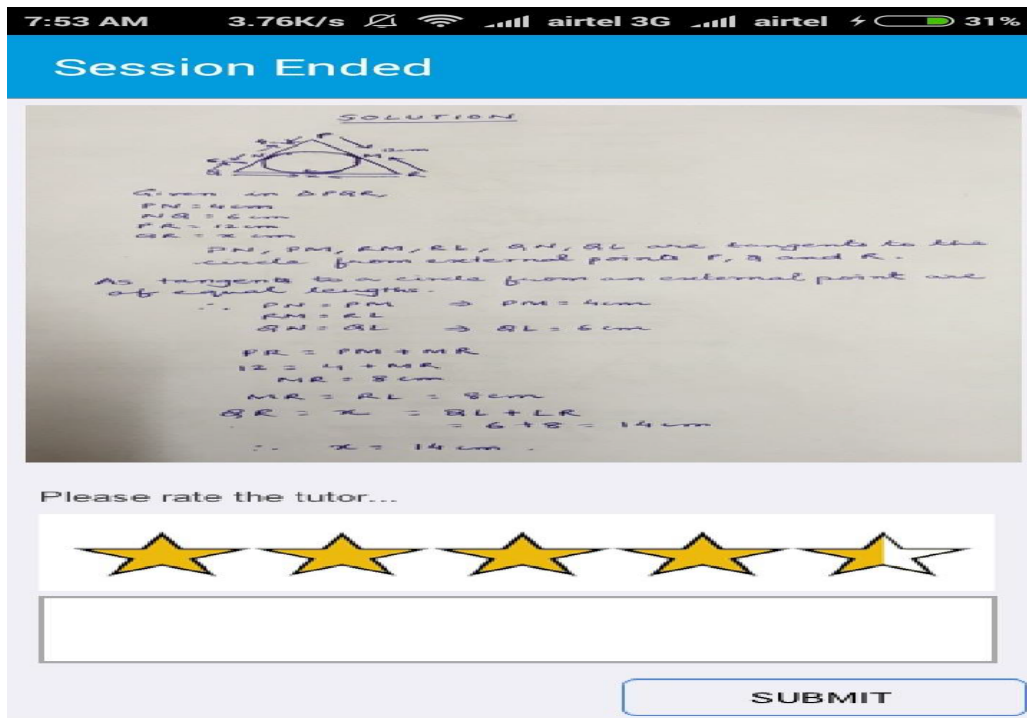
When the session ends, the current chat is transferred to chat history activity.



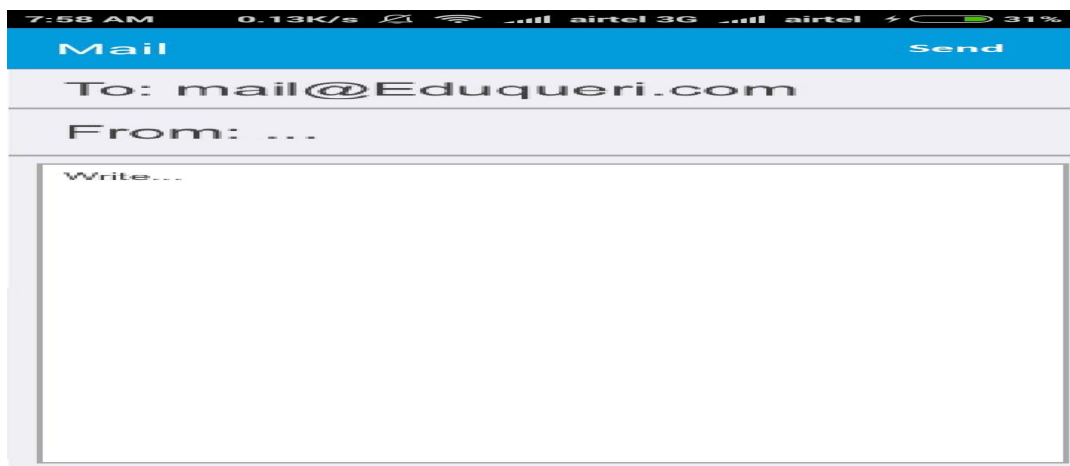
This page has student's personal information like name, grade, credit balance and a link to invite friends and change password.



Add credits opens payment gateway and links to bank account, from where user can add credits from his bank account. User can also earn free credits by inviting friends.



When student receives solution from the tutor the session is ended by the student and rates tutor with comments.



Issues related to app are sent through the mail activity. The issues are reviewed by the admin and proper solution will be provided.

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CONCLUSION

The application system will be very useful to students who need instant solution to their problems in a better way. By this way technology can be introduced to students in a better manner. The app has a friendly client interface which makes students extremely comfortable while using this. A student can ask any number of questions any time as there are no limitations. Since student communicates with expert tutors he may get the simple solution for their problem. The app is suitable for those students who are stuck with problems related to their academics.

In future, improvements will be made in User Interface. Video and voice call features will be integrated to the app so that students can directly speak to the tutors, which help students to understand what a tutor is teaching. Video call feature helps student communicate better with tutor. Language subjects will be included. Also increase the number of subjects like general knowledge too.

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