

Mobile Quiz through Wi-Fi on Android Platform

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Abstract- The Mobile Quiz is an android application that provides a new technique of Playing Quiz using mobile phones. This application is especially developed for People who like to play challenging Quiz. The project provides an effective challenge to the player. Generating random questions for the user who participate on the quiz. Whenever Wi-Fi is connected in android mobile, the user can play quiz. Users can have their own interest in particular area to participate. Whenever the server updates the game immediately mobile get alert saying that they can update the app.

Questions are loaded from the cloud database if and only if there is internet connection otherwise it asks to check internet connection. At the last of the game it displays the score like number of answers correct, skipped and total questions will be shown. These days people are preferring 'Agile Model'. In 'Agile Model' after every sprint there is a demo-able feature to the customer. Hence customer can see the features whether they are satisfying their need or not.

Index Terms—Mobile Quiz through Wi-Fi, Wi-Fi connectivity, Random question generation, Parse Database to retrieve and store Questions, generating results.

1. INTRODUCTION

The main goal of this paper is to motivate students to be engaged in specific content where he/she is interested in playing Quiz and get strong on their subject foundation by using their Mobiles connecting through the Wi-Fi. The user can show their interest in particular area to participate.

1.1 Organization of the paper:

Mobile Quiz through Wi-Fi feature is Android based application which is used to engage participants to play quiz. The main goal of the project is to making participants active in participating quizzes. The users can download the application and must connect to the wireless network to enjoy playing game.

2. Overview of Mobile Quiz on Android:

Mobile Quiz is an android application that provides a new technique of Playing Quiz using mobile phones. This application is especially developed for People who like to play challenging Quiz. The project provides an effective challenge to the player.

2.1 Smartphone Software Development Course Design Based on Android:

"Mobile computing is popular when wireless network has been deployed almost everywhere. Smartphones have been the important tools in our society for the abundant functions including communication, entertainment and online office etc. as the pivotal devices of mobile computing. Smartphone

software development has also become more important than before. Android is one of the emerging leading operating systems for smartphones as an open source system platform. Many smartphones have adopted this platform and more smartphones will do so in the future. It is also an emerging problem on how to develop software for smartphones based on Android and those platforms like it. We propose smartphone software development course design based on Android in this paper. What this course focuses is how to teach the development technology to Students. The course design has two parts including the syllabus design and hands-on lab design. At the same time, the innovations are also described in detail and these innovations play a key role in the teaching." [5]

2.2 Design and implementation of network packets collection tools based on Android Platform:

"The android system architecture and security mechanism are introduced briefly, and a network data collection program based on the android platform is proposed." [8]

2.3 Quiz Fun: Mobile based quiz game for learning:

"This research paper is based on the software that was prototyped in order to increase students' interactive participation in learning. The software also intended to motivate students to be engaged in specific subject content. The students were inspired to use the activity by encompassing the gaming mode in teaching and learning. Further, excitement was created by mobile enabled game mode. The mobile game consists of two modes as multiplayer mode and single player mode comprising of three levels with an embedded scoring mechanism. The scoring system provided students with immediate responses making the game fun and highly interactive. In-depth studies were carried out in relation to teaching and learning methodologies, which enriched the gaming environment that was prototyped, facilitating the students encouraging learning environment. Encouragement through quick feedback and hints showed a change in the participant's attitude towards assessments.

Use of smiley faces and other symbols for communicating emotions was an added feature in the developed prototype. The mobile application was built using Java Platform, Micro Edition (Java ME) while the web application was created using ICE faces, which is an integrated Ajax application framework for developing Rich Internet Applications (RIA). The prototype built to implement the proposed idea was evaluated by several users. The research found high interactivity among students and found students becoming enthusiastic in participating in learning activity." [6]

Parse Database:

Parse is a cloud-based data management system that allows you to quickly develop web and mobile apps. Parse is one of the more popular Backend as a Service platforms. The service offers three products in one package: Parse Core, Parse Push and Parse Analytics. Parse Core generally handles the saving of data and social media integration. Parse Push is used to send push notifications. It enables the developer to customize, schedule and send push notifications to either all registered users or a select group of users. Parse Analytics enables to track app's data. You can track usage data such as installations, active users, user retention, push notification open rate etc.

In manifest file, add the following permissions before the application tag.

```

1 <uses-permission android:name="android.permission.INTERNET"/>
2 <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>

```

In the Application class, add an onCreate() method with the following code.

```

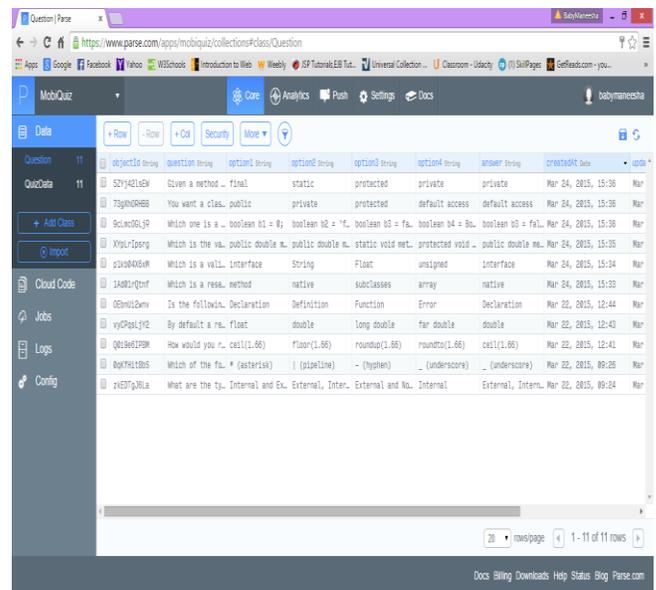
1 @Override
2 public void onCreate() {
3     super.onCreate();
4
5     Parse.initialize(this, APPLICATION_ID, CLIENT_KEY);
6
7     ParseObject testObject = new ParseObject("TestObject");
8     testObject.put("foo", "bar");
9     testObject.saveInBackground();
10 }

```

Replace the placeholders above with your app's application id and client key, these can be found in the Parse dashboard. The code that we've placed after Parse is initialized is only for testing. We will remove it once we establish that the app has saved data to Parse.

Organize the imports needed in the file with Ctrl+Shift+O . (You can setup Eclipse and Android Studio to do this for you automatically to save yourself some typing. You'll only have to set an import yourself when there is a conflicting library). In the article, I won't state the imports needed unless there are potential conflicts.

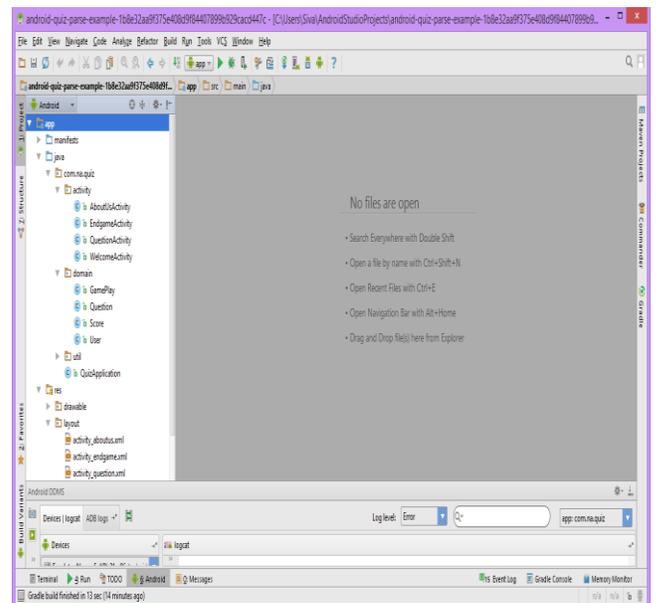
Run the app and navigate to the Parse dashboard in your browser. Select your app and click on the Data Browser tab. You should see a table data of the object that was created above.[7]



Using Parse for Web-based Projects

Before we start, let's take a minute and think how a traditional To-do list app could be created using a LAMP stack.

- We would create a MySQL database.
- We may have a PHP class that is responsible for performing CRUD operations. Optionally, you could just have a bunch of PHP functions.
- We may use JavaScript and Ajax on the client-side to call the respective PHP scripts and pass in query strings.
- We would need to sanitize the input to protect against XSS attacks, as well as worry about database security in general.
- If a collaborative app, we would need to track different users and manage their lists. More code, more tables, and more schemas.
- we would need to make sure your database stays performant.



3. Background of the problem:

Challenges:

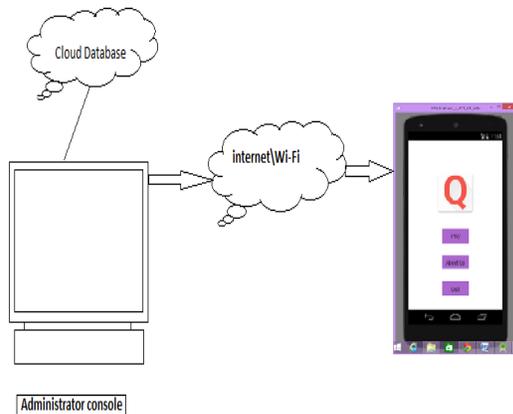
1. To replace power point quizzes and pre-designed quizzes with a fresh mobile app.
2. To develop a fast and easy way to create and conduct quizzes among users.
3. Generation of random questions for different users.
4. Updating app in server gives alert message to mobile.

4. System Architecture and Services

The system architecture of our mobile quiz through Wi-Fi is mainly includes the following components

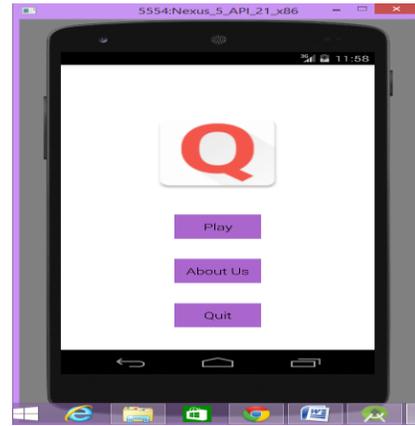
1. Mobile quiz application
2. Wireless internet connection
3. No SQL Database
4. Generating Reports after Quiz

Mobile quiz through Wi-Fi is an android application which loads in the mobile like app; whenever the internet connection is available the mobile platform turns into Quiz environment. When internet connection is available, then the Quiz application loads questions from NO SQL Database and then user plays quiz and generates report based on the answers answered and skipped. Questions will be stored in cloud whenever the internet is available then the Quiz loads questions from database and randomizes the questions when participant wants to play again.

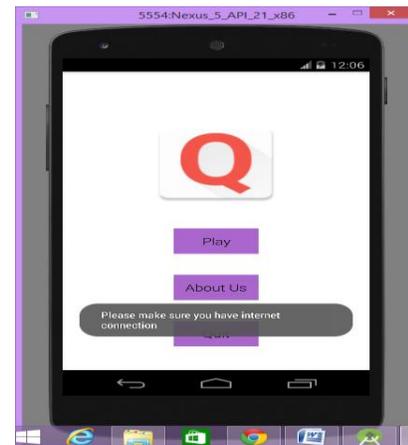


5. Prototypes and Implementation:

The proposed project of our Mobile Quiz through Wi-Fi is to demonstrate the feasibility to use in Android mobile and make Quiz as interesting platform and fun to participate as well as to improve knowledge.



Home page



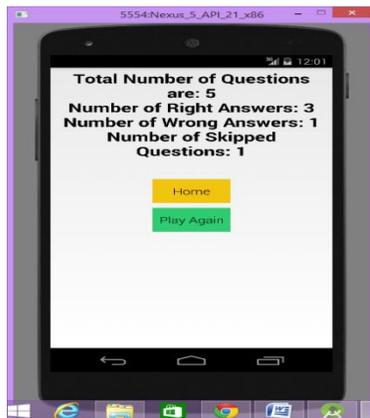
Restricts when there is noInternet Connection



Subjects displayed



Questions displayed



Score Displayed

AUTHORS' BIOGRAPHY



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6. Conclusion :

This system is used in the organizations / colleges and also in schools where Wi-Fi is connected with mobiles for interactive GK Question. It is very useful to turn mobile phones in to a Quiz platform as makes user to improve their knowledge.

7. References:

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