A Cross-Platform Based Application for Mobile Devices on Financial Transaction Management System

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Abstract— Mobile applications today cater to different clients and various domains including but not limited to e-commerce, service based, job portals, online ticket booking etc. With the increasing demand and expanding customer base, mobile application development has become a norm of IT based companies and businesses. The technology has developed immensely in the past few years. This application allows user to view all the contact list of their phone inside the application. The contact list can be modified from the application itself and the changes will reflect in the phonebook. The user can create groups of contacts. The user can provide a unique name for each group and each group may contain two or more members. The group list is visible to the user. In each group events can be created. All the details pertaining to the event, like the time, venue, date etc. can be entered and will be saved in the database. This application will keep a track of the financial transaction that are performed during the event. All the data, transactions and events are listed in a remote database, which can be accessed by the members of the group and the admin.

Key words: Mobile Computing, Mobile Application, Internet, Contacts, Events, Financial Transactions

I. INTRODUCTION

Even though mobile technology is not new to the market, increasing use of mobile devices and mobile application has emerged in last decade and its future is even more exciting and promising. The first mobile device (a cell phone) was introduced by Motorola in 1970s. In the initial years the competition between the handset manufacturers were fierce and the phone software were developed in-house. With the evolution and introduction of new features, mobile devices stated capturing the market by storm and common operating system started coming to existence. Some of the popular operating system that are available these days are Windows by Microsoft, Android, IOS, BlackBerry OS among others.

The main objective of the application developed is to track the financial transaction made by a group of users during an event. Any smart phone user can download the application in their phone or tablet and install it. Once installed user will have the option to register with unique user id and password. Once user is registered they can log in to the application.

Once logged in user can view all their contact list inside the application. User may select any contact name and view their phone number, may choose to edit the same. Any changes made inside the application will reflect in the phonebook as well. At the bottom of the application, an option to add new contacts is provided. User can enter phone number and name and add contact to their contact list.

The application will allow user to create contact group. Click on create group button, the application will ask for the group name, once group name is entered, user need to click on the next button. The next button will take user to contact list, from where user may select two or more contacts. Once the contact is selected, a message is displayed to confirm that the user is added to the group. The home page of the application provide an option by which any user can view the groups that they have created. Each group name should be unique.

Every user have the option to create events. Event name, venue, event date, number of days of the event needs to be specified by the user. Once these details are entered user may select the group name that will attend the event. Each member who is attending the event will have the option to go to that particular event, click on it and enter financial transaction details for that particular event. Each details entered by a group member can be viewed by other group members. The financial transaction are not carried out through the app, but the app actually provide a virtual record of all the transactions.

All the user contact details, group details, event details and transaction summery are stored in a remote database, which enable user across the globe to communicate and use the system. The biggest advantage of this application is that it can be used across various different platform of mobile devices.

II. LITERATURE SURVEY

A. Existing and Proposed System

There are several apps in the market which deals with contact information and event creation. This particular app not only allow user to view and update contact details but also enable user to create groups, create events and create transaction.

This proposed application will combine several features, of various different application available in mobile devices, into one. It is not only compact but also can be used by users from various different location and allow them to communicate in an error free manner. Any financial expense made during the event will be listed clearly and will be available for all to view, which in-turn will result clear, precise information.

B. Feasibility Study

The application development process will include requirement analysis, designing, development, testing and implementation phases. The market has already several applications that allow to make financial transaction, crate events and edit phone contact information. But this particular application will combine the work of several different apps into one.

The application is developed using Appcelerator Titanium, which not only can create cross-platform product but also use simple JavaScript, so that it can be developed easily. Since a simple and efficient platform is used for development, the time taken to complete the project will be comparatively less and production cost can be minimized.
III. PROPOSED SYSTEM

The application is designed keeping in mind the various different platforms that is commonly used in mobile devices.

The object is to reach user across the board, so that everyone can take advantage of the application. The application allow user to create events, which can be used by professionals and students alike. In order to achieve this objective the application is developed using Appcelerator Titanium. Titanium is a cross-platform JavaScript runtime and API framework used to do mobile development on iOS, Android, and, most recently, the mobile web, with possible future support for Blackberry and Windows.

Figure 1 shows the Data Flow Diagram for the proposed system. Based on this diagram the application is developed. This diagram clearly shows the relationship between the various components of the application and how the data travel and communication is made between the application/user and the database.

IV. IMPLEMENTATION

The application can be downloaded across platform like IOS, Android among others. The design and layout will remain the same across all platforms. In order to use all the features of the application user need to connect to the internet. This will enable the user to create and view group, create and view events and add and view transaction. All the information will be stored in a remote database. The application can be used offline as well, where user can view and update contact details. Once the application is connected to the server all the changed data will be updated.

V. CONCLUSION

This application will benefit users across board. It can be used by organizations as well as individuals. Working professionals can use the application to create/update organizational events. This application will allow a small, as well as large group of people to have clear communication regarding the event and the expenses made during the event. The application is so simple to manage that even students can use the application to organize college or school events and any expenses made can be monitored by a senior member of the group.

Another advantage of this application is that, it can be used by individuals globally and has no geographical boundaries.

VI. FUTURE ENHANCEMENTS

In future, the application may include the facility to chat or make calls, which further enhance the feature of clear communication.

The application may be linked to online payment options, so that the fund transfer can be completed through the application itself and that will provide an end to end solution.

REFERENCE


