E-Diary Assistant

Leo Bright Tennisson N¹, Subash V², Thivstan Vishal J³, Sri Vyaas M⁴, Sanju L⁵

ABSTRACT

On average, a smart phone has 41 applications, and each day many numbers of new phones are being activated. Perhaps the foremost startling statistic is that currently, 1.3 million Android devices are activated a day which suggests that each 24 hours, quite fourfold as many new smart phones and tablets are found out than babies are born. And once the devices are activated, they're checked on the typical 150 times every day once every 6.5 minutes. The apps in both Apple's and Google's app store combined is over 2 million. Admittedly, the apps are the aim behind the smart phone. Furthermore, on the average every smart phone contains 41 apps which are used for normal needs. A calendar is a tool that keeps every aspect of our life focused in one place, allowing you to worry less and accomplish more. Using the calendar is the best way to avoid procrastination and general tardiness. Calendar app is that the most ancient and best way for time management. The first cellular device with the calendar app was Simon. Though, it's not called a sensible phone but it's the primary cellular device which has address book, calendar, and appointment scheduler apps with its touch screen display. Since then many works have been going on in improving the calendar app. Mobile Operating System is an operating system designed for smart phones, tablets and other mobile devices. It is just like a regular operating system for a computer but it combines other features along with camera, audio, video, radio, bluetooth, speech recognition and many others. E-diary is an android application which accesses the calendars of multiple users, for instance members of a family or staff in a particular department and will pull out the events from every calendar. Hence, everyone in the group can see others' events on one screen in customized format. It also helps the user to create, edit, and delete events of his/her calendar. Additionally, this application will use an efficient strategy to update data only if there is any change in the events, making it faster. There are many other applications in the Play store but they cannot get rid of redundant events and reminders of events belonging to other users. This causes tons of disturbance to the user. On the contrary, E-diary application will use an intelligent algorithm to compare the events in some ways supported the time, name, and place of event and this application will only generate reminders for the user scheduled events.

Keywords: Calendar, Android Application, Reminders, Events

1. INTRODUCTION

Issues with existing calendar applications is accessing a calendar by multiple users. Other developers have tried to unravel this issue during a different way. However, the existing apps have their own disadvantages. Google calendar is hottest application within the present market. In spite of its popular features, it's some drawbacks too. Some of them are discussed below. Users need to add their email account in the default calendar on the device to view events. But, to know others' events, for instance one of the family member's events we need to add his/her account to the default calendar on the device. In this way, we can view their events but most of us don't want to share email

¹ Assistant Professor, Department of Computer Science and Engineering, SRM Valliammai Engineering College, Tamil Nadu, India

² UG Student, Department of Computer Science and Engineering, SRM Valliammai Engineering College, Tamil Nadu, India

³ UG Student, Department of Computer Science and Engineering, SRM Valliammai Engineering College, Tamil Nadu, India

⁴ UG Student, Department of Computer Science and Engineering, SRM Valliammai Engineering College, Tamil Nadu, India

⁵ UG Student, Department of Computer Science and Engineering, SRM Valliammai Engineering College, Tamil Nadu, India

password with other. These are one of the major disadvantages. Assuming the email address and password are being shared, others' account can be added to the calendar. By doing so, the default calendar app will give notification alerts for the newly added account events as well which creates a lot of disturbance to the current user. On the other hand, there is chance where current user can edit/delete and add unnecessary events to the other account. Moreover, if there are any similar events in both the accounts, the default calendar app shows every event as individual event which can irritate the present user. In the same way, the application like aCalendar, Agenda, Ever Calendar will also generate notification alerts for others events and they do not get rid of redundant events.

2. RELATED SEARCH

2.1 Internet Calendar and Scheduling Core Object Specification (iCALENDAR) Compatible Collaborative Calendar-Server (CCS) Web Services

There has been a transparent got to have a standard format for representing calendar data to unravel the interoperability issues between differing types of Calendaring and Scheduling applications. Internet Calendaring and Scheduling Core Object Specification (iCalendar) defines a standard format for calendar data exchange to progress the extent of interoperability possible between different calendaring and scheduling applications. In this paper, they describe their approach to resolve interoperability issues by providing implementations of a Collaborative Calendar-Server (CCS), a bridge module, and a Global Multimedia Collaboration System (GlobalMMCS) Client Module. The CCS is implemented supported the iCalendar specification as a set of Web Services. The bridge module allows the CCS to speak with different Calendaring and Scheduling applications, which are supported the iCalendar specification and use http methods for interactions. GlobalMMCS portal interacts with the CCS to schedule meetings, to store and also to retrieve calendar information through the GlobalMMCS Client Module.

2.2 Bring Your Own Calendar: A CalDAV-Based Virtual Calendar System

The sharing of schedule information across individuals or organizations has been made simpler by the web and private devices like smartphones. However, it's not as easy in bring-your-own-device environments thanks to problems associated with privacy and cultural gaps among organizations and individuals. Current calendar systems don't have any easy, fine-grained calendar sharing scheme to support such environments. In this paper, they propose a replacement calendar system that employs a fine-grained calendar sharing scheme called Virtual Calendar, which is used to predicate on CalDAV proxy engine. This calendar system satisfies such fine-grained demands as "I want to share my calendar with my wife for less than those articles that start after 5 pm or on weekends".

3. PROPOSED METHOD

An Android application which help the user to remind their important schedule and events. Automatic Birthday wishes will be sent to the contacts which is stored in MYSQL through WhatsApp and Email. Staff's important schedules will be notified to them automatically by fetching data from the MYSQL which is used as a database. It also includes another feature which helps the staff to send the announcements to specific year students and to specific department students through the WhatsApp and Email easily.

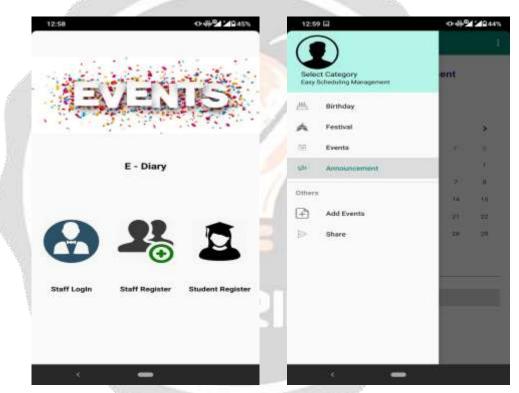
E-diary application continuously shares the event details with others using 000 Web Server. User need to login into the application by registering into the system. If the User is new to the E-diary application and want to create a new group to share the event details he/she should register into the system by creating a shared password. ON the other hand, if the user wants to join in an existing group, he/she should login directly with the shared password of the group in which he/she wants to join. The details are stored in Local database and also in 000 Web Server. Once user enters into the application, it will automatically retrieve the event and contact details from the given Gmail account. After synchronization is done, events details are stored in 000 Web Server. Other users name and event details will be automatically retrieved from the 000 Web Sever.

Synchronization is that the process of initiating consistency among the source data to focus on data storage and the other way around. This process takes several minutes to synchronize the data from the source to target storage. In android mobile OS, user has facility to synchronize with the account within the device. By doing so, the application

will synchronize the data from the mobile device. With the storage once the synchronization is completed, it will automatically collect the data like contacts, groups and calendar resources from the device. Similarly, the E-diary application synchronizes with the Google account in the default calendar on the device and stores it on the Parse Web Server. Later, the user can directly add, delete and update event details directly from the E-diary application. This application also has many user-friendly functionalities like getting rid of redundant events by using an algorithm to merge and unmerge the events. Furthermore, a color scheme is used to differentiate the user events. Adding thereto, the app provides customized format to look at the calendar during a day, week, month or year mode

3.1 USER INTERFACE DESIGN

User Interface (UI) is designed with the help of android studio application either using coding on activity_main.xml or design view. Sign up module allows each staff to register into the application to be able to use its features and login module allows to verify the authorized staff who are using the application. After Successful login, calendar will display the highlighted events such as birthdays, festivals, current date. Features such as announcements and birthday wish to the students using email and WhatsApp platforms and reminder to the staff about current events are added alongside the calendar module.



3.2 DATABASE CONNECTION

Here we are using MYSQL database to store details about each individual staff who need to be authorized to have access and event information such as date, name of the event and all student information such as name, dob, phone number, place, department, year and so on. By connecting our e-diary android app to the database, it is possible to use the key information (phone number, dob) to set reminders to the selected candidates or group of candidates (reminders include announcements, birthday or festival wishes) with the help of messaging platforms such as email and WhatsApp. With the help of database, we can also set reminders to the staff who is using this application about the events that are planned on the particular date.

3.3 SCHEDULE MESSAGE

With the default messages like "happy birthday to you", we can easily send the reminders to the students or the staffs on occasions like birthdays, festivals and so on. It is a real time module which automatically schedule according to the database key information such as date. For birthday wishes and festivals, it will look up the

database field date and then fetch the event name and delivers the corresponding reminders to the respective students. We are scheduling these messages to reach the students and staff around the particular time specified by the user.



3.4 SETTING REMAINDERS

After scheduling default messages, we are now practically implementing the application program on how to process the reminders to the respective students. It is designed with checkboxes to select the specific information (like year, department) in which it is necessary to be able to communicate only with particular students regarding the event or important announcements. Using select all checkbox, it allows us to communicate with all the students irrespective of the selection. After Selection process, the reminder will be sent through the e-mail.



4. CONCLUSIONS

According to our research many of the applications based on calendar provides us promising features but still it couldn't satisfy all our needs as a smart assistant, while to give away all needs to the user our e-diary application

assists the user to perform more functionalities (more importantly automatic scheduling of information) to interact with the group of students in an institution or a private organization as we are using email as means of faster communication across the globe. In future, performance of our application can also be improved by introducing machine learning module to organize the data properly and using approval of WhatsApp for automatic scheduling it will more effectively replaces the email means of communication as WhatsApp is more user-friendly compared to email.

5. REFERENCE

- [1]. A.F Mustacoglu, Wenjun Wu, G Fox, "Internet Calendar and Scheduling Core Object Specification (iCALENDAR) Compatible Collaborative Calendar-Server (CCS) Web Services", 2006
- [2]. Yoshinari Nomura, Yuya Murata, Hideo Taniguchi, Masakazu Urata, Shinyo Muto, "Bring Your Own Calendar: A CalDAV-Based Virtual Calendar System", 2013
- [3]. Satoshi Nakamura, "Calendar for Everything: Browsing and Finding Cross-Media Personal Contents by Using Calendar Interface", 2008

