

# Android Application for Updation

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**Abstract** - Organizations aim at acknowledging their entities with latest updates. Building a website site for an organization that contains everything about that particular organization is necessary but also hard to maintain. It is effective for business and advertising but not proven to be very handy. The number of mobile users has increased as compared to the desktop users so it is ideal to create a mobile application because it can be accessed by anyone, irrespective of time and it can be optimized to the lowest configuration possible. This app will support host- client relationship. All the updated data by host overtime would be stored in and managed by firebase database. This application is based on languages such as XML and Java; where XML is going to play a major role in creating animations and presentation while Java helps in designing its functionality.

**Key Words:** news app, instant notification, updating app, android application, portal news access, push down notification.

## 1.INTRODUCTION

In this digital world, each and every person is connected to each other. One can reach the internet anytime and anywhere. In other words, with this facility of advanced methodology of digital communication, a mobile application can act as a digital hand in delivering all the concerned information that an organization wants to be known by its entities. Organizations prefer to use offline methods to send the information on any subject to its entities which is very time-consuming and there is always the possibility that its entity is not aware of the updated information which leads to spreading false information.

To overcome this issue, this app is being created which can provide all the details in one place about everything that is being and will be circulated in the organization. By this app, the users will have the facility and access to all the necessary information updated by the organization.

This app starts with a login step categorized as "Register" or "Sign In". The client will need to register when he opens the application for the first time and can login with the administrative power once he signs up as the Host. The menu contains two options -first is to view data and the second is to update it. If the client logs in with the admin power, they can provide the necessary and required updates. Moreover, they have the privilege to see updates by other

hosts too. All the updated data is stored and managed by the firebase database itself. If the user chooses to login as a client, they will have the facility to view all the updates assembled according to the date and time. They won't be able to make any changes to the updated data, but can access it from anywhere and at any point of time.

According to the organization rules, hosts are instructed not to be added in any groups in the social networking sites. But, they are to convey their messages on time. Unfortunately, they don't have any other option than getting added in such groups and even after all this, they keep on getting numerous texts and calls regarding petty queries, clarity on rumors and unnecessary notifications as they are also the part of the groups. To get them over such issues and to create a direct path for communication by the host, they themselves sort any of such needed updates. The basic idea is to reduce rumours and being updated. Thus to enhance these features, an application is being created that acts as a solution to all such problems.

Moreover, the app is not just useful for hosts but also for the clients too.

Hence, the clients will receive instant notification regarding all the happenings going on, in and around their organization, such as about its new rules and regulations, upcoming holidays, placement related detailed information, exam schedule, seating arrangements, upcoming events of all the departments as well as those in and around their surroundings by trustable sources.

## 2. LITERATURE SURVEY

To provide a friendly interface to do human-machine interaction, user-used instant messengers, and defining interfaces to abstract general functionalism, the message translation and session was designed in server [1]. Yet, they haven't added policy mechanism in the notification server [1].

In their paper, their main focus was on the users' browsing behaviors and to set preference according to users' records [2]. But they are still working on this as all the users can't be categorized in this as they surf through their genuine preferences [2].

They studied the features of network news and proposed an event detection algorithm based on key element recognition [3]. The influence of different named entity is yet to be studied [3].

Their aim was to create an easy to use mobile, interactive, flexible and extensible client server app [4]. For that, they used Java Programming languages and 1111Mobile edition support, MySQL database, PHP Dynamic content and Apache Open Web server [4]. They didn't include Sports and Currencies (Exchange rates) topics in the app [4].

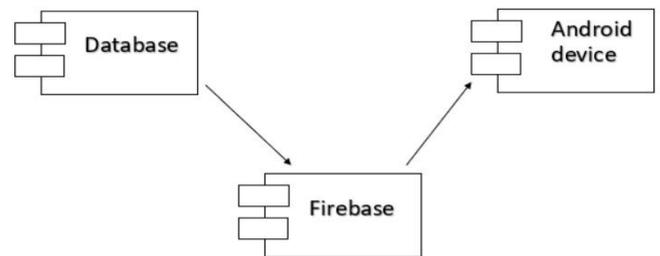
Comprehensive app testing can be time-consuming for a developer due to different characteristics of the platform and different user preferences [5]. To overcome this, they proposed a novel framework named CROSS MINER to analyze the essential app issues and explore whether the app issues exhibits differently on the three platforms [5]. The framework automatically captures the distribution of app issues such as battery, crash, memory, network, privacy, spam and UI [5]. As modern applications are made with modern technologies that can have modern issues [5]. The cross minor frame work will not be able to detect those issues [5].

They tried to put together the discoveries, invention and advancements that have brought together on the social media over many years [6]. In addition to that, they attempted to draw out the focal points and conceivable impediments of social media to human kind [6]. They were not able to upload information with some eye catchy priority tags like accident, crime etc. [6]. Secondly, they were not able to design this app in such a way that this can be utilized by health care department like you can request blood donor near you anywhere any time [6].

Today we use different sorts of platforms like Windows, Android, IOS [7]. For each platform, we need same app to be developed several times due to lack of integrated cross platform mobile application [7]. This paper extends ICPMD by proposing a new code conversion approach based on XSLT [7] and regular expression to ease the conversion process [7]. Several apps are converted from WP8 to Android and vice-versa, but this thing is yet to be applied in every app on all three platforms [7].

Their work mainly focuses on Android Wear and one of its core interaction mechanism: The control flow due to notifications as the popularity of Wearable devices is expected to increase dramatically over the next decade [8]. They developed two apps "W 1.x" for hand held devices and "AW 2.0" for the wearable devices [8]. Data synchronization between hand-held and wearable devices, techniques to reduce battery consumption and security analysis can be upgraded to the latest technology [8]. But this is yet to be practically applied [8].

### 3. SYSTEM ARCHITECTURE



The following are the various modules for the Android updation application.

**FUNDAMENTAL PAGE:** After being signed in, the client will be diverted to this action. Along these lines, the focal movement from where the client can get to every one of the administrations is given by this application. This would have left-sheet on which catches will be there for various purposes [3]. The sheet can be gotten to by swiping left to right. The catches it will have are: Profile, Events, Holidays, Local News, Placement.

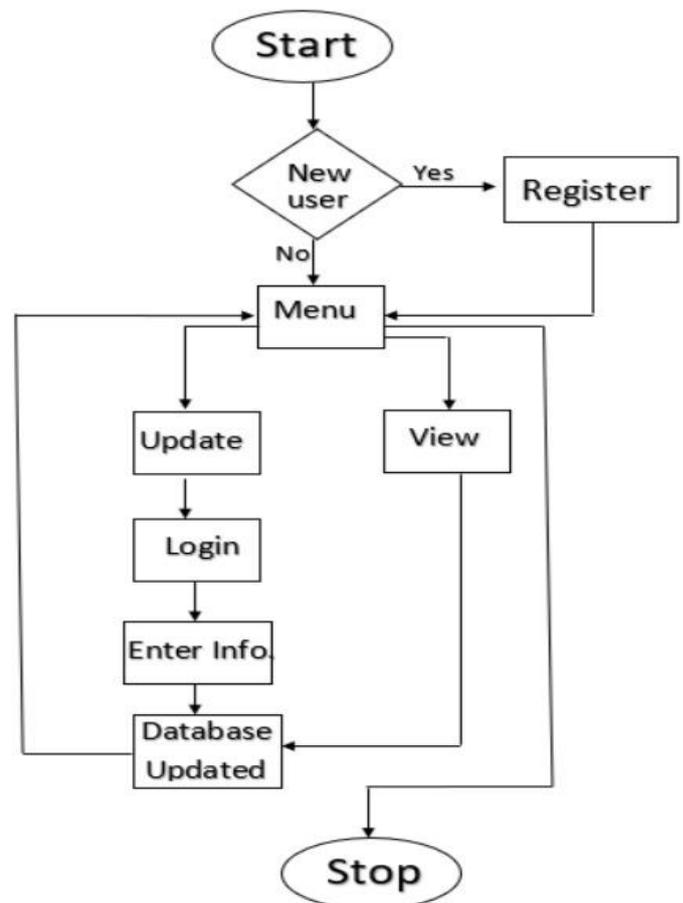


Fig 3.2

**REGISTRATION PAGE:** This movement will be in charge of the making of the client account. With the assistance of "content fields", spinners, and dropdown boxes the client will top off all the given fields and toward the finish of this movement there would be a catch that would settle the record creation and produce a "Toast" message.

This movement will be in charge of the formation of the client account. At the season of enlistment, the client should top off just the email and secret key areas of the movement. This will be finished with the assistance of Plaintext Fields [3].

Toward the finish of this movement, there would be a catch "Join" that would settle the record creation and produce a "Toast" message expressing the making of record was a win or a disappointment relying upon the status of the validation.

The points of interest entered by the client for account creation is put away in the firebase cloud and can be overseen by the application executive through the site.

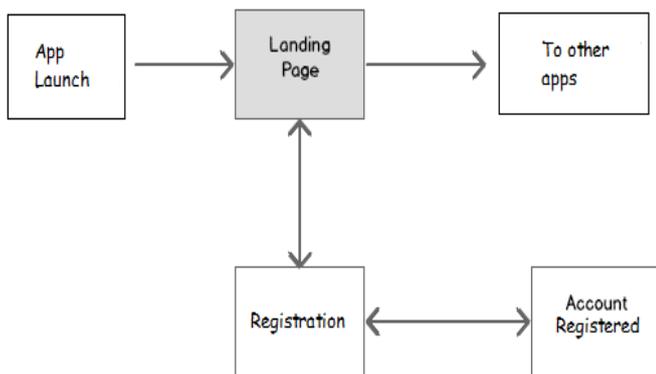


Fig 3.3

**LOG-IN PAGE:** This action will contain just two discharge handle that is the client's email-id and the secret key. After entering the information, the client's accreditations will be checked, with the information put away in the online database and if the information exists, the client will be signed into the application.

This action will contain just two discharge handle that is the client's email-id and the secret word.

After entering the information, the client's certifications will be verified, with the information put away in the online database and if the information exists, the client will be signed into the application. In the event of wrong secret key or wrong email entered by the client, a toast message will be produced requesting that the client check the information entered by him [3].

Furthermore, the login subtle elements of the client will be taken care of and spared by Firebase. On the off chance that

the client has overlooked his secret word, there is another choice "Overlooked watchword", which will send him a secret key reset connect to his enrolled email id.

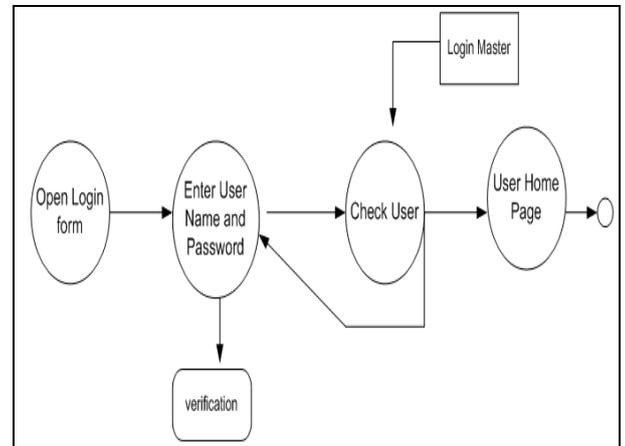


Fig 3.4

#### 4. METHODOLOGY

Working of this android application is easy to use, but will be a one-path correspondence from the host to client.

This application begins with login step ordered as host login. The client can login with one of the given choices. Once on the off chance that they log into as host, they get an administrator control and can give important and required update. Besides, they get a benefit to see updates by other host as well. Moreover, as a host likewise gets an alternative while updating, who all can see the updated information. As soon as any admin updates any information, the registered users will get a pop up notification about it so the users can check it as soon as they get updated. All the updated information is put away and overseen by firebase itself. While if the client decides to login, they can simply have a benefit to see every update under isolated sections, collected by date and time.

This reduces the rumor's regarding various topics:

- Hosts can straight forwardly update the information they want to.
- For clients, it would be much easier as they are getting everything in updated form and moreover they won't be in any false hope and confusion regarding rumors

This application likewise gives a supporting hand in keeping refreshed with respect to unrelated data and expense structures and in addition it would likewise help in diminishing perplexity in regards to any related data.

Exam seating related data can likewise be updated.

In the placement that are discussed positions we never become acquainted with correct pre-requisites in regards to work, applying for this application additionally helps in giving data in regards to arrangement session going on What's precisely bundle is.

It is more than once said "Time is cash", and this application isn't just sparing time however a lot of vitality as well, it goes about as some assistance for each phase of its clients included and gives a simplicity in intercommunication amongst staff and student.

## 5. MODULE IMPLEMENTATION

### 1. Register/login module:

Initially, the user is supposed to register himself either as the client or as host on firebase database with their respective E-mail id. If they want to login as the host, they will have an option as well as responsibility to post all the necessary updates and even will be able to view the updates posted by others while if the user registers himself as a host he will only be able to view all the updates. Once user registers himself by giving his basic details like registration number, full name, date of birth, mail id, and password, details will be stored and they will be redirected to login page. Here, they will be asked to log in with registration number and password with an option of "keep me logged in". If the users accepts with this option they would be signed in even after he exits the app. This feature makes the application more user friendly.

### 2. Main module:

After logging in this is the first page that the user notices. This page differs with student and staff log in page. When user chooses to log in as the staff he will have an option like to first will be to post an update (as he supposed to be host of the application) while the second will be to view an update. Updates would be regarding local news, placements, functions, holidays, and events. Whereas once they logt in as clients he will be restricted for just to view all updated the contents.

### 3. Notification module:

Whatever way they log in, they'll be notified with the update. This module helps user to get an instant notification. This helps in a way that user doesn't needs to open the app every time to check whether there is an update or not, rather he will be notified instantly once update is generated. Moreover this feature also helps user to view relevant article as he will be redirected to that particular page from where the notification was generated. This feature can also be switched off notification according to users comfort.

### 4. Scheduler module:

Once the things are updated user can make plans accordingly. This module helps user in planning for any vacation and upcoming events. It also helps last moment peeps in completing stuff on time.

## 6. CONCLUSION

More or less small and midsize organizations are following the mobile trend, understanding that an effective mobile strategy involves more than just a mobile-friendly website. But despite of all these advances, machines cannot match the performance of the human counterparts in terms of accuracy. Digitalization plays a major role in delivering information but, before informing concerned entities regarding the information host needs to verify certain basic things, e.g. host and client both needs to have this application with working internet connection. Technology used by this app is a push notification.

## 7. FUTURE ENHANCEMENT

In future, few features of this application can be enhanced and more effectively utilized. Presently, this application faces the problem of server crashing, which means it does has a limitation over clients using server. Multiple users can connect to server at a time but, once the number of clients exceeds its limit, hindrance will be generated in the path of connecting to the server which if not stopped can lead to crash server. Moreover, this application can support only small data packets for transmission, where data packets have small size with certain limitation and violation to this can corrupt data and can even lead to hindrance in transmitting data in future. As of now in any scenario, user won't be able to share any multimedia file or large documents e.g. doc. file, neither data can be stored nor be managed for a long period time e.g. the current version of fire base being used supports for only data upto 4 week, once time period exceeds it automatically deletes the fetched data from the queue. The present version of firebase database is not capable of storing data beyond 1GB. It has certain constrains in reading, writing and deleting data from firebase. Restrictions are as followed:

1. Writing data: 20k/day
2. Reading data: 50k/day
3. Deleting data: 20k/day
4. Stored data: 1GB Total
5. Bandwidth: 10GB/month

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