Design and Development of a Cloud Based News Sharing Mobile Application

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***Abstract*-- The quickly expanding influence of individual cell phones (cell phones, tablets, and so on.) is giving much wealthier substance and social collaborations to clients on the move [2].The late distributed computing innovation, with its rich assets to make up for the requirements of cell phones and associations, can presumably give a perfect stage to bolster the predefined versatile administrations. It is instinctive and normal for clients to socially associate with their teammates or rivals in multi-party conferencing. Such social associations ought to be bounteous extra unconstrained to clients in these applications [4]. In this paper, we discuss about the various techniques in cloud computing, future advances and how these techniques will lead to the ultimate news application which with the collaboration of all will be literally a life saver.**

***Keywords*---**cloud computing; distributed computing; visual studio.

I. INTRODUCTION

In late 10 years, Internet has been growing appallingly rapidly. The expense of capacity, the force devoured by PC and equipment is expanding. Storage room in information focus can't address our needs and hence the framework and repair of unique web can't settle above enquiries, so new arrangements are required. In the meantime, substantial undertakings need to study information supply completely to bolster its business [1]. The gathering and examination ought to be composed on a fresh out of the plastic new stage. So we require a fresh out of the plastic new registering model to use the empty assets of tablet, expand the financial productivity through up usage rate, diminish the hardware vitality utilization.

This is an application software for daily user.in which a user get news update from other user. User can get updates from its surrounding by simply setting the area range (1km, 2km,city,country).This application will help the user to keep updated by his physical location like society, office, College, if a disaster is up to his next door he can help, protect and make some realistic decision. This application serves best for each individual person.

The main objective of the application is to update one person by the other person using social link. It can be used to aware people from the disaster. So one can protect the other.

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A. Organization of the paper

Rest of the paper is organized as follows. First we present the Literature Survey. Then discuss about the various cloud computing techniques and styles. Then focus is on the architecture and implementation of the application. Finally we discuss about the Conclusion followed by the References.

II. LITERATURE SURVEY

A. Studies carried out in the Literature Survey

Feng et al. (2012) [1] discusses about the need for spontaneity in social applications and how socializing spontaneously will increase the productivity.

Attarwala (2012) [2] discusses about the status of an android based endeavor suggested as 'Altered help by means of group sourcing on Informal community'. The application allows us to share the present location using maps.

Greer et al. (2012) [3] discusses how Cloud computing, Mobile Technology, and Social Networking Services, for example, Facebook and Twitter has turned into an essential piece of society all through the occasion of a crisis or debacle.

Bhattacharya et al. (2012) [4] discusses about how the information is spread around the globe with the help of social media and also how the diffusion of information takes place in social media websites.

Zhang et al. (2013) [5] discusses about the idea of step by step instructions to adequately abuse cloud assets to encourage portable administrations, particularly those with tight cooperation delay necessities.

Chang et al. (2013) [6] discusses about the usefulness of APIs and Service Oriented Programming in creating applications with Location Based Services.

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Musyaffa et al. (2013) [7] discusses about helpful social composing procedure exploitation SNS (Social Network Service) substance, particularly SNS occasion photographs transferred to Facebook by the writer and working together writers.

Choo et al. (2013) [8] discusses how community review score and historical itineraries can become a part of the decision of the travelers while planning an itinerary.

Deshmukh et al. (2014) [9] discusses about the idea extracting valuable news from large web based data and also removing noisy data.

Chen et al. (2014) [10] discusses how information trends from social media can be used for stock market prediction.

B. Summary of the Literature Survey

Table 1. Author wise addressed issues in their papers

Author Name	Issue Addressed
Feng et al.[1]	How to socialize spontaneously with mobile applications.
Attarwala [2]	The status of an android based endeavor suggested as 'Altered help by means of group sourcing on Informal community'
Greer et al.[3]	Configuration and reconciliation of the PEPP Facebook App with the aim of serving as reference outline for creating long range interpersonal communication applications with the help of cloud computing and mobile technology.
Bhattacharya et al. [4]	Diffusion of news to people around the world through social media
Zhang et al.[5]	The most effective method to adequately misuse cloud assets to encourage portable administrations, particularly those with stringent cooperation delay necessities
Chang et al.[6]	How to use APIs for creating applications with Location Bases Services (LBS).
Musyaffa et al.[7]	Shared social creating system utilizing SNS (Social Network Service)
Choo et al. [8]	Framework to organize three information layers from the gathering, the business head and the customer in agenda proposal'
Deshmukh et al.[9]	Extraction of relevant information from large web data storage
Chen et al.[10]	Exploiting social media for stock market prediction

III. WHAT IS CLOUD COMPUTING?

A. The Outline on Cloud Computing

Numerous registering specialists & professionals have endeavored to diagram Cloud service in differed ways. In light of the perception of the quintessence of what Cloud Computing is promising to be, this paper takes after the meaning of distributed processing proposed in.

"A Cloud is a type of parallel and distributed system consisting of a collection of inter-connected and virtualized computers that are dynamically provisioned and presented as one or more unified computing resources based on service-level agreements established through negotiation between the service provider and consumers." [7]

At a superficial look, Cloud service seem, by all accounts, a mix of bunches and Grids. Notwithstanding, situation is not like this [5]. Cloud services are obviously cutting edge information focuses with hubs "virtualized" through hypervisor advancements, for example, VMs, progressively "provisioned" on client request as a customized asset gathering to fulfill a particular administration level assention, built up with the assistance of "arrangement" and can be gotten to as a compostable administration by means of "Web a pair of.0" technologies.

Cloud Computing excludes Private Clouds & is the entire of SaaS and Utility Computing. We focus on SaaS Providers (Cloud Users) and Cloud Providers, which have become less thought than SaaS Users.

Three viewpoints are recent in Cloud Computing according to hardware point of view [6].

a) The mask of unfathomable figuring resources on interest, accordingly wiping out the necessity for Cloud customers to driving force way forward for provisioning.

b) The transfer of an ahead of time obligation by Cloud customers, in like manner allowing associations to begin little and extension hardware resources exactly when there's a climb in their requirements.

c) The ability to get use of enlisting resources on a temporary reason as required and give them as required, thus repaying protection by holding machines and limit go once they are not any more steady.

B. Cloud Computing Style

In spite of the fact that people have totally distinctive perspectives on the cloud computing, they have as of now achieved a concurrence on the vital style on that. Its style is as per the following [3]:

a) SAAS (Software as a service)

This sort of cloud computing exchange projects to uncountable clients through program. In the client's perspectives, this can spare quality on servers and programming framework. From the supplier's perspectives, they just need to keep up one program, this can advance spare quality. Salesforce.com is so much the premier prestigious organization that has this sort of administration. SAAS is ordinarily used in human asset administration framework and ERP (Enterprise Resource Planning). Google Apps and Zoho.

b) Utility Computing

As of late Amazon.com, Sun, IBM and different organizations offering stockpiling administrations and virtual administrations have shown up. Cloud computing is making virtual information place for IT industry to make it will offer administration for the aggregate web through accumulation memory, IO hardware, stockpiling & figuring energy to a virtual asset pool [8].

c) Network service

Network administration has a closed connection with SAAS. The administration suppliers will encourage software engineers to create applications principally in view of web besides giving single machine methodology through API.

d) PAAS(Platform as a service)

Platform as a service is the sort of distributed computing giving advancement environment as an administration. You can utilize the agent's instrumentation to build up your own particular program and exchange it to the clients through web and servers.

e) MSP (management service provider)

This is one amongst the customary uses of distributed computing. This application generally serves the IT exchange rather than end clients. It is much of the time utilized as a part of in mail infection filtering and program checking.

f) Commercial service platform

The business administration stage is the blend of SAAS and MSP (Mixed sign Processor), this sort of registering gives a stage to the cooperation amongst clients and administration supplier. For example, the client singular cost administration framework can deal with client's cost agreeing client's setting and organize all the administrations that clients obtained [10].

g). Integrating internet

It can incorporate all the organizations that give comparative administrations, so clients will look at and pick their administration supplier [9].

IV. ARCHITECTURE OF THE APPLICATION

The architecture of the application consists of two phases: a front end and a back end. The front end of the application includes the user interface with which the user will interact with the application to perform the various functions of the application. The back end of the application consists of a cloud server to contain all the data for the application where all the data can be stored and used for the functions of the application. In this application we have used Facebook's Parse.com as the cloud server at the back end.

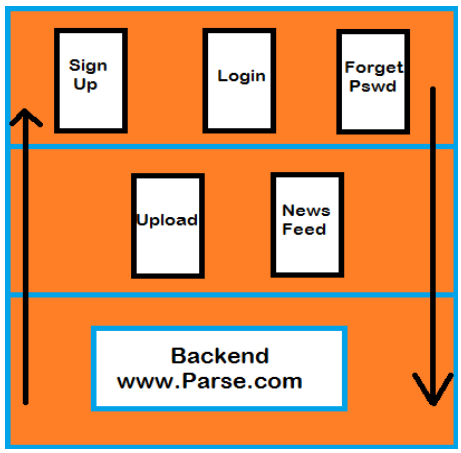

Fig 1: The Architecture of the application

1. Front End: Front End of the application includes:

   a. Signup: Used to signup new user.
   b. Login: Used to login already registered user.
   c. Forget Password: Used to retrieve password for your account which you have forgotten.
   d. Upload: Used to upload pictures and information to the news bulletin.
   e. News Feed: Area where all the news from the community will be posted.

2. Back End: Back End of the application consists of Facebook's Parse.com cloud server.

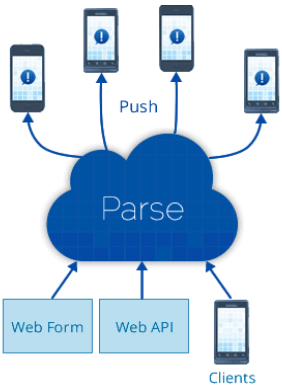

Fig 2: The Architecture of the Parse Cloud Server

The following figure shows an activity diagram which describes how everything in the application is going on and in which order and which operation leads to change of the state of the application.

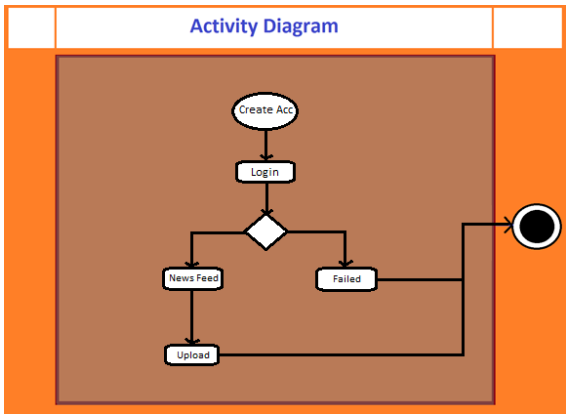

Fig 3: Activity Diagram showing the functioning of the application

First the user will open the application and tap the "Create Account" button. After creating the account the user will login using the credentials which the user entered while creating the new account. After logging into the application, the user will go to the news feed and upload the news along with the news material that the user want to share with community. If the user fails to login into the account after the creation of the account then the user will try again to login using the credentials carefully.

A. The Functioning of the application

This application will help you to post the news which will be displayed on the news feed page. First the user will login or if he is new then he have to create the account. After he logged in a news feed page will be displayed and if he swipe he will get an upload page where the user will upload the new; tittle, image of the occurring event, description.

This app not only limited to windows phone but also used various platform because it is going to be hosted on the cloud. This app is currently using parse as a backend cloud where all the data are storing like user information image title and the description. The parse is supported by the Facebook Corporation.

V. IMPLEMENTATION

A. Front End of the Application

Login Page, Signup Page, Forget Password Page, Upload Page as well as News Feed Page are all created using the visual studio for windows phone.

.Net/Xamarin APIs are used to create the application.

a. The Sign Up Page

The signup page of the application looks like this. The user has to enter his username, password and the email address for the creation of the account.

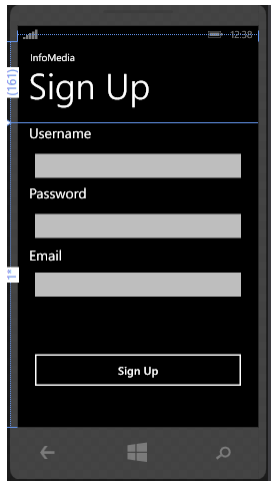

Fig 4: SignUp Page

b. The Login Page

The login page of the application looks like this. The user has to enter his username, password that was entered during the creation of the account and on successful authentication the application will take the user to the Upload page where the user can post the news along with the picture.

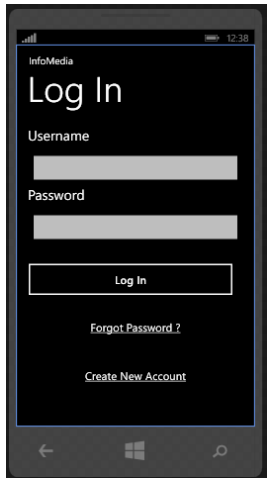

Fig 5: Login Page

c. The Forget Password Page

The forget password page will allow the user to retrieve or change the password for his/her account in case the user is not able to remember the password to his account or if the account his hacked by someone.

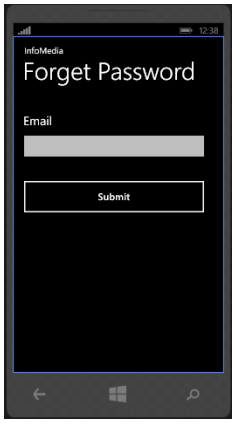

Fig 6: Forget Password Page

d. The Upload News Page

After successfully logging into his/her account, the user can upload the news of the surrounding by clicking the picture with the camera of the smartphone and post it to the news feed with text from where the news can be viewed by all the users that are registered with application.

Fig 7: Upload News Page

VI. AREAS OF UTILIZATION

a. If someone moved to a new society, he/she will easily get information of that society based on the past data by this application. So the person may know the type of society and can take best action.

b. This app can minimize the crime as this app will give past records of mostly crime area or less crime area so we can use police force effectively for those areas rather than scattering police in different areas.

c. Hospitals can also do health campaign with the help of this application.

d. This app can be used to find missing person also.

e. This app can provide employment to reporters that will definitely increase the GDP

f. There will be a good chance for budding reporters they can use this for their practical implementation.

g. This app will provide the first hand information to the users unlike the News Channel which only gives a second hand edited information.

h. This app can be used in stock market, so if there is any decrease or increase in price we can see those changes directly from the other stock market person.

VII. CONCLUSION AND FUTURE SCOPE

In this Paper, we have attempted to put together the discoveries, inventions and advancements that have been brought out in social media over many years. We have additionally attempted to draw out the focal points and conceivable impediments of Social Media to humankind.

a. What if you can upload the information with some tags such as accident -Minor/Major, crime, missing person, Garbage along with your news and also what if you can inform to your local authority suppose you can provide information about crime to local police nearby you, or you can easily get ambulance if there is an accident case..

b. Second way is what if you can use this app for health care department What if you can request blood donor just like you can request the taxi like ola or uber. If they like to donate the blood they can accept the request and we can save the life of the people.

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