Gatherly: Gather around, join the conversation today.

Mobile application

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Abstract

Gatherly is a platform that lets you collaborate with your friends, family, and colleagues. Gatherly gives you the flexibility to share messages, documents, and images with your network. Along with a web presence, Gatherly also has a mobile presence with a mobile application. This paper elaborates the wide array of features available on the mobile application.

Keywords

"Live chat", "chat-application", "firebase"

Introduction

In this day and age, users prefer to access social media sites from their smartphones rather their desktops or laptops. According to a recent survey, Facebook has 2.27 billion active users. If we look at Figure 1, we can see the device usage of facebook users. More users access Facebook using their smartphones than using their desktops or laptops, it is the matter of convenience. It is essential for a social media website to have a mobile presence. Gatherly is a social media website build on LAMP stack. It has the combination of all the best features out in the market. Users can chat one-on-one with their friends, they can create groups both public and private. Users can share pictures, files,

and documents. Users can like, dislike, and leave comments on the material that their friends have shared. It is integrated with third party API's like Gravatar which lets users standardize their profile pictures across social media platforms. Users can also access Gatherly using their Github accounts, this was done using Github's API which was seamlessly

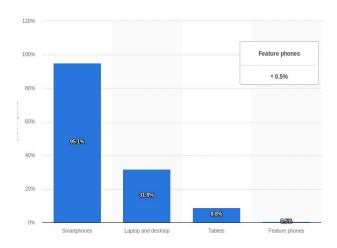


Figure 1: Users preferred method of accessing social media websites.

integrated within the website. This paper discusses the mobile build up of Gatherly.

Problem statement

In order to increase the usage of our social media website, it is important for it have a mobile presence. A mobile application is convenient, and faster. The initial

challenge was to choose a platform, we looked at the basic statistics of market share. According to Statista, 54.5 percent of smartphone users in the United States were using devices which ran Google's Android, and 44.3 percent of users owned Apple devices. The natural choice was to first develop an Android application, In order to increase user base it was necessary to make an application that runs on any android device new or old.

Implementation

A mockup of the application is the essential first step, unlike a website not everything can be displayed on the small screen size of a phone. The design has to be intuitive in order to keep the user engaged in the application. The logic should flow in such a way that the user doesn't have to struggle with the features of the application. To create a base mockup it is important to identify the important features of the application. The main feature Gatherly Mobile should have was live chatting, users should be able to send message, share files, and photos in real time. Along with this a profile page, global chat room, groups page were some of the essential features identified based on Gatherly's website.

The application was build using Android SDK version 3.2, it supports the latest version of operating system i.e. version 9 codename pie and the oldest version it supports is 4.0 Icecream sandwich which covers 100 percent of users in the Android market base. For the database, we picked

Firebase over MySql database. Firebase gives the flexibility to build live chat features, it provides a real time database unlike traditional databases which are relational database. Web applications even the ones that use Ajax talk to the servers by sending separate messages, interfacing directly with a centralized server database such as MySQL is not preferred. The MySQL security layer isn't capable of making fine-grained distinctions between various types of access. Along with the control, Firebase provides important real time feedback on crash statistics and why they occured. Statistics on the number of users, how long did they access the application, which page did they spent their time on, all of these statistics are important for the owner of a social media website.

Future Enhancements

The natural next step of this project is to integrate Gatherly mobile with the website and have a natural flow of information and communication. We also want to focus of adding more features to the mobile applications that makes the user experience more complete.

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References

Android Developers. (n.d.). Retrieved from https://developer.android.com/

Firebase Guides | Firebase. (n.d.). Retrieved from

https://firebase.google.com/docs/guides/

Moqups · online mockups made simple. (n.d.). Retrieved from https://moqups.com/

U.S. daily mobile media usage time 2018 | Statistic. (n.d.). Retrieved from

https://www.statista.com/statistics/469983/time-spent-mobile-media-type-us

a/