Development of Content Management Chat Application System

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ABSTRACT

People may now interact with social media on computers and cellphones because to technology's rapid advancement in meeting public wants. Nowadays, people are connected to social media wherever they go, with more than 30% of the world's population using social media platforms to interact, educate themselves, and share pertinent information across boundaries. The goal of this study is to create a content management chat application that will allow users to conveniently manage their posts despite their challenging and constrained schedules. The objectives are to offer a system that easily and conveniently creates posts, a system that allows for private messaging without first saving the contact to the device, Allow users on the platform to add and create categories for easier chat management by classifying each chat, to offer a function that could let users choose whether to be online or offline, an application that could offer a module for backing-Up files, and a system that will be able to distinguish between group messages and direct messages. The end product is an online chat application for content management that enables quick and simple ways for people to communicate remotely.

Keywords: *Web 2.0, Content Management, Chat application, User experience, Post scheduling*

INTRODUCTION

Through instant messaging, online forums, and social networking, the internet has permitted or accelerated new forms of human connection. The invention of a networked web (Web 1.0), which allowed various computer networks to communicate with one another, propelled innovation on an exponential wave and made the concept of a connecting the world more attainable. The era of social networks known as Web 2.0, which is dynamic, content-based and very receptive to user input, is progressively giving way to the more consolidated Web 3.0 network, which highly individualized, focused and decentralized.

Even though many people continue to voice their concerns about these systems, it is still true that the internet has become a crucial component of how we conduct our daily lives and businesses. The internet has helped to close the time gap even more assuring that the newest technologies will be available immediately. Email communication is gradually becoming thing of the past; chat programs are interactive technologies that enable interaction between two or more people, and they are more efficient than email. By sending and receiving messages, a chat application makes it simple to communicate with people across the globe.

Users are able to experience the same engaging and energetic interactions through personalized messaging features online as they would offline. An efficient content management chat app is crucial to enable users to have real-time collaboration with file sharing capabilities, audio and video calls, as well as creating and scheduling of

posts to help users manage their posts conveniently and easily. In the age of remote working, chat apps aren't just tools but are modern offices.

Difficulty of the present chat app to provide a module for simple message scheduling, absence of document (file) storage in case of emergency, difficulty to distinguish between group messages and direct messages and poor accessibility of most app functions are the driving forces behind this paper

LITERATURE REVIEW

[1]. 36% of smartphone owners use messaging apps like WhatsApp, Kik, or Imessage, while 17% use apps that delete sent messages automatically, like Snap Chat or Wickr. This information was gathered to determine which messaging apps appeal to smartphone owners in comparison to automated features like automatically deleting sent messages. 85% of adults use the internet, and 67% use a smartphone. These findings demonstrate the growth of various communication technologies that cater to various social requirements while also highlighting some privacy-related concerns.

[2]. In their study, examined Nearpeer (NP), an academic social media platform, to see if it may increase team project engagement and goal connection among students, which could, in turn, lead to greater project performance. In a virtual study poll on the use of the Nearpeer platform, students who used it more frequently than once a week outperformed those who used it less frequently on team tasks. Additionally, it was discovered that participation on the social platform improved team cohesion and the virtual team experience in achieving common goals and objectives. The main disadvantage is an increasing reliance on chat apps and a corresponding drop in productivity when chat apps aren't used.

[3]. traditional corporate communication strategies for public relations have changed to make use of social media. This is because of the growing trend and shift in technology. Using networks and communities, people can use interactive computer platforms to develop and share information, ideas, and other kinds of expression. Organizations use social media to better understand their audience by keeping abreast of the trends that are being noticed by that demographic. Additionally, they take advantage of social media's cheaper advertising rates compared to those of conventional periodicals, radios, and television. Additionally, it was discovered that social media companies were able to get immediate feedback from customers about their goods and services. Additionally, it has been demonstrated that businesses use both conventional forms of advertising and social media's novel opportunities. It is clear that social media application tools have aided businesses in increasing product branding, expanding their brands' appeal to more consumers, and meeting those consumers' needs.

[4]. Develop a chat program called "CHATY". This social networking application takes advantage of technological advances to enable communication and media sharing among its users. It provides a fantastic one-stop shop experience for staying in touch with your friends and acquaintances. The average Nigerian citizen, which comprises the local peasant farmers, market women, craftsmen, low-income earners, less privileged, and lower social strata persons who are many in population, was designed for by CHATY to be very user-friendly and to encourage development. The addition of the Pidgin English function is a major motivator and draw since it aids in bridging the academic gap between those who believe the Queen's English is the greatest and fosters fun and greater idea-crossing, which boosts the economy. However, it does not make message scheduling simple.

[5]. The availability of working memory peaks in the morning, which is why the timing of social media posts matters to the majority of people who consume social media information. People that have more working memory are more alert, attentive, inquiring, and deliberate. However, as the day goes on, people take on more responsibilities or experience increased stress. Working memory accessibility is hampered by stress because cortisol levels rise [6]. People's capacity to digest new information is constrained by their working memory availability, which also affects their desire for and capacity to interact with social media content. As a result, it was hypothesized that people's desire to engage with content would be highest in the morning, moderate in the evening, and lowest in the afternoon because working memory availability is highest in the morning, lowest in the

middle of the day, and moderate in the evening for most people [7]. However, it was not accurately represented how people divide their time between various browsing activities.

METHODOLOGY ADOPTED

The enhanced Chat app system records how the new content management system's additional capabilities are used, giving chat apps an efficient way to function. An individual might utilize the system to save a file in a certain directory by tapping on the file on the device screen, choosing the directories, and then clicking on save. On the new system, a user might schedule a message to be delivered to someone by picking on the person's contact, entering messages, selecting the right time and day, and then clicking on the finished button. The upgraded Chat app system also offers a form of choice interface that allows users to select whether or not a user can see whether they are online and whether direct communications should be set apart from group conversations.

ALGORITHM OF THE IMPROVED CHAT APP SYSTEM

Algorithm

Step 1: Program Start;
Step 2: Display Welcome Screen;
Step 3: Enter Username and press the required identifier;
Step 4: If (Username && biometrics identifier is correct) { GOTO Dashboard of
the User;
}
Step 5: else {
Display Wrong Verification Identity;

} GOTO Step 3; Step
6: end if;
Step 7: Stop;

Registration Algorithm

Step 1: Program Start;
Step 2: Display Welcome Screen;
Step 3: Enter Username and press the required;
Step 4: If (Username && biometrics identifier is correct) {
GOTO Dashboard of the User;
}
Step 5: else {
Display Wrong Verification Identity;
} GOTO Step 3;
Step 6: Click on Registration from the Dashboard; Step 7: Enter

Registration Details;

Step 8: Click on Submit on the Registration form {
GOTO Dashboard of the User;
}

Step 9: end if;

Step 10: End;

UPLOAD OFFICE PROCEEDINGS ALGORITHM

Step 1: Program Start;

Step 2: Display Welcome Screen;

Step 3: Enter Username and press the required identifier; Step 4: If (Username && biometrics identifier is correct) {
GOTO Dashboard of the User;
}

Step 5: else {
Display Wrong Verification Identity;
} GOTO Step 3;

Step 6: Click on Upload Office Proceedings from the Dashboard; Step 7: Enter the files/memo Details in the space provided;

Step 8: Click on Submit {GOTO Dashboard of the user;
}

Step 9: end if; Step 10: End;

SHARING INFORMATION ALGORITHM

Step 1: Program Start;

Step 2: Display Welcome Screen;

Step 3: Enter Username and press the required identifier; Step 4: If (Username && biometrics identifier is correct) {
GOTO Dashboard of the User;
}

Step 5: else {
Display Wrong Verification Identity;
} GOTO Step 3;

Step 6: Click on Sharing Information from the Dashboard;

Step 7: Enter the files/memo Details and direction of the file in the space provided; Step 8: Choose the user(s) you want to share it with;

Step 9: Click on Share {GOTO Dashboard of the user;
}

Step 10: end if;

Step 11: End;

INNOVATIVE IDEAS ALGORITHM

Step 1: Program Start;

Step 2: Display Welcome Screen;

Step 3: Enter Username and press the required Biometrics identifier; Step 4: If (Username && biometrics identifier is correct) {

GOTO Dashboard of the User;

}

Step 5: else {

Display Wrong Verification Identity;

} GOTO Step 3;

Step 6: Click on Innovative Ideas from the Dashboard; Step 7: Enter your ideas in the space provided;

Step 8: Click on Upload {GOTO Dashboard of the user;

}

Step 9: end if;

Step 10: End;

UPLOADING NEW DEVELOPMENT ALGORITHM

Step 1: Program Start;

Step 2: Display Welcome Screen;

Step 3: Enter Username and press the required Biometrics identifier; Step 4: If (Username && biometrics identifier is correct) {

GOTO Dashboard of the User;

}

Step 5: else {

Display Wrong Verification Identity;

} GOTO Step 3;

Step 6: Click on Upload New Development from the Dashboard;

Step 7: Enter the new developments that are required in the space provided; Step 8: Click on Upload {GOTO Dashboard of the user;

}

Step 9: end if; Step 10: End;

The figure 1; below shows the improved system Architecture which grants any user to received messages without first storing the individual's contact on the device. This additional feature is captured in the improved system because of emergencies.

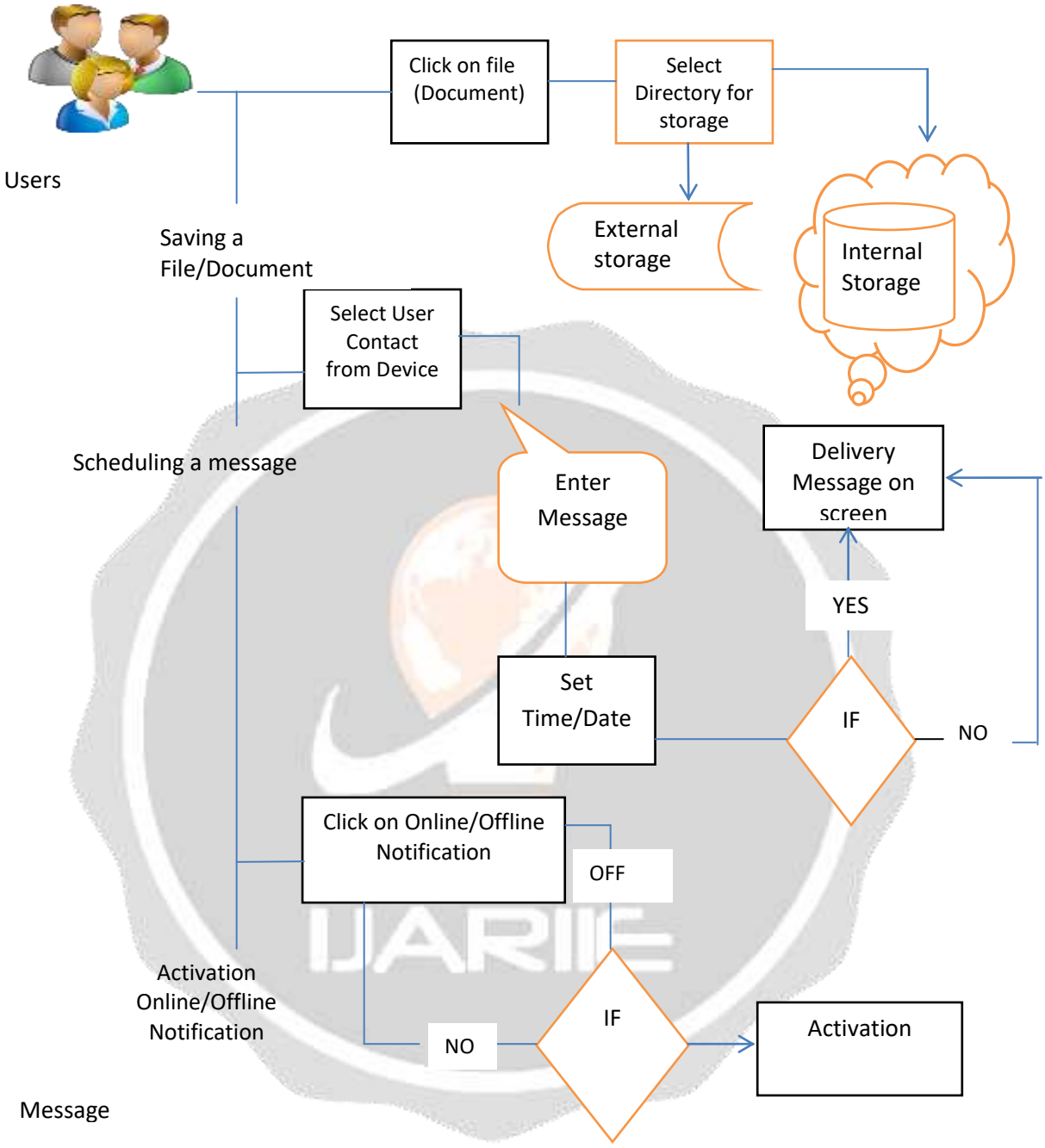

Figure 1 Architecture of the Improved Chat app system

CONCLUSION

The study described a chat system that might facilitate group communication among users and allow for the scheduling of message delivery at specific times. Even if a loved one isn't online right now, you may still chat with them quickly thanks to a feature called message scheduling that allows you to schedule when the message should be delivered. The study report also makes sure that chat applications are used while minimizing unhealthy

levels of reliance through a relative choice of automation via the scheduling function and also makes sure that a platform has a strong approach to data protection not only for users' personal information but for the platform as a whole. It also decreases the stages of difficulty in usability attributes to take in an even early poll of app users.

REFERENCES

[1] Maeve 2015 Mobile Messaging and social Media; https://www.pewresearch.org/internet/2015/08/19/mobile-messaging-and-social-media-2015

[2] Graham C, and Jones Nory 2018. Impact of a Social Network Messaging App on Team Cohesiveness and Quality of Completed Team projects in an Undergraduate Team Project. Journal of Education Technology Systems. 47.10.1177/0047239518821937

[3] Venkateswaran Radhakrishnan, Ugalde Bernard and Rogelio T. (2019). Impact of Social Media Application in Business Organizations. International Journal of Computer Application. 178. 5-10. 10.5120/ijca2019919126

[4] Obadjere E.N (2020). "Design and Implementation of a Real Time Chat Application": A Thesis Submitted to the Department of Computer Science. Baze University Abuja, Nigeria. https://www.studoc.com/document

[5] Kanuri K.V, Chen Y, and Sridhar S. (2018). Scheduling Content on Social Media: Theory, Evidence and Application. Journal of Marketing https://www.researchgate.net/publication/328179895/Scheduling_Content_on_Social_Media_Theory_Evidence_and_Application

[6] Luethi M., Meier B., and Sandi C, (2009). Stress Effect on Working Memory, explicit memory, and Implicit Memory for neutral and emotional stimuli in healthy Men. Frontiers in behavioral neuroscience, 2, 5.

[7] Lupien S.J, Buss C., Schramek T., Maheu F., and Pruessner J. (2005). The Effect of Stress and Stress hormones on human cognition: Implication for the field of brains and cognitions.