iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** V **Month of publication:** May 2023

DOI: https://doi.org/10.22214/ijraset.2023.51512

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue V May 2023- Available at www.ijraset.com

MAHAPARIWAR Application

Ashtivkar Prachi[1], Lakeshri Bhargavi[2], Misal Sagar[3], Patil Mihir[4]
Department of Information Technology, University of Mumbai

Abstract: ***An Android family app aims to provide a platform for family members to communicate and stay connected with each other. This app is designed to have a user-friendly interface that allows family members to share their schedules, create shopping lists, and share important documents, such as emergency contacts and medical information. It also features a built-in messaging system that enables users to send text, voice, and video messages to each other. The app will also allow users to create and share events, such as family gatherings, birthdays, and anniversaries, and receive reminders for these events. The primary objective of this app is to foster communication and strengthen the bond between family members by providing them with a centralized platform for staying connected.***

Keywords: Family Mobile App, Android Studio

I. INTRODUCTION

The app is designed to help families stay connected and organized in their daily lives. The family app will have a variety of features, including a shared calendar, task manager, shopping list, and messaging platform.[4]

This will allow family members to coordinate their schedules, assign tasks, and communicate with each other in a seamless and efficient manner. Moreover, the app will also have a section dedicated to family members' health and wellness, including features such as a step tracker and meal planner. This will encourage families to maintain a healthy and active lifestyle together.[2]

In addition, the app will also have a section for family fun and entertainment, with features such as a virtual board game platform, and a shared photo album. This will provide families with opportunities to bond and enjoy quality time together. Overall, this family app aims to be a one-stop-shop for all things related to family life. With its user-friendly interface and practical features, it will simplify and enhance the way families communicate, organize, and enjoy their time together.

The main features of family app are as follows:

1) *Shared Calendar:* A shared calendar feature can help family members keep track of each other's schedules and plan events together.
2) *Task List:* A task list feature can help families assign and manage household tasks, such as chores or grocery shopping.
3) *Messaging Platform:* A messaging platform feature can help family members communicate with each other easily and quickly.[4]
4) *Photo sharing:* A photo sharing feature can help family members share photos and memories with each other.
5) *Location Sharing:* A location sharing feature can help family members keep track of each other's whereabouts, especially useful for parents who want to keep track of their children's location.
6) *Emergency Contact Information:* An emergency contact information feature can provide easy access to important phone numbers, such as doctors or emergency services.[3]
7) *Integration with other Apps:* Integration with other apps such as Google Calendar, Google Maps, and other productivity apps can enhance the functionality of the family app.
8) *Customizable Settings:* Customizable settings can allow users to personalize the app to their specific needs and preferences.
9) *Security Features:* Security features such as password protection or two-factor authentication can ensure that the app and its data are secure and protected from unauthorized access.[3]

II. LITERATURE REVIEW

Studies have shown that family apps can improve family communication and organization. A study by Hsieh et al. (2019) found that the use of a family app improved family communication and increased family cohesion. The study also found that family members felt more connected and involved in each other's lives. Another study by Lee et al. (2020) found that the use of a family app improved family communication and reduced family conflicts.

The features of family apps also play an important role in their effectiveness. A study by Bai et al. (2020) found that the features of family apps, such as shared calendar, task list, and photo sharing, were positively associated with family satisfaction and cohesion. The study also found that the ease of use and accessibility of the app were important factors in its effectiveness.

©IJRASET: All Rights are Reserved

Privacy and security are also important considerations in the use of family apps. A study by Zhang et al. (2021) found that privacy concerns were a significant barrier to the adoption of family apps. The study also found that security features, such as password protection and encryption, were important factors in increasing users' trust in the app.

A study by Croucher et al. (2018) found that the use of a family app improved communication and relationship quality between parents and their adult children. The study also found that the app increased family connectedness and reduced feelings of isolation.

A study by Harris et al. (2019) examined the use of a family app in families with children with special needs. The study found that the app improved family communication, coordination of care, and access to resources. The app also helped families manage their child's medical appointments and medications. A study by Oviedo-Trespalacios et al. (2020) explored the impact of a family app on family driving behaviors. The study found that the app improved family communication about safe driving practices and reduced risky driving behaviors.

III. THE PROPOSED FAMILY MOBILE APPLICATION

This section will give the overview of our proposed system through the use case diagram and block diagram. Through use case diagram shown in fig:3.1 the users would get an idea about the features that they will get within the app and also how a user will interact with the app will be easily clear. The user will get features like uploading of docs, pictures etc along with payment option, a emergency feature,[3] games and many more things. Now the block

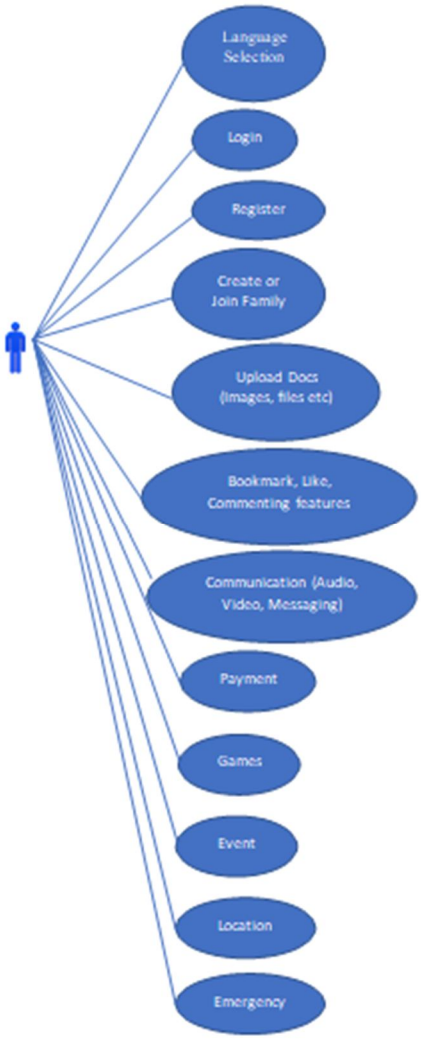


Fig: 3.1. Use Case Diagram of Mahapariwar App

Diagram that is shown in fig: 3.2 it gives the idea about the flow of the app how it will work. First of all, the user will see a splash screen of the app followed by the language selection page which provides user with 8 different languages to select and after that they will get a page of 2 step OTP verification once the user has been verified with his/her phone number then he/she will have to sign in or sign up and after successfully logged in they will be able to see the main screen of the app which

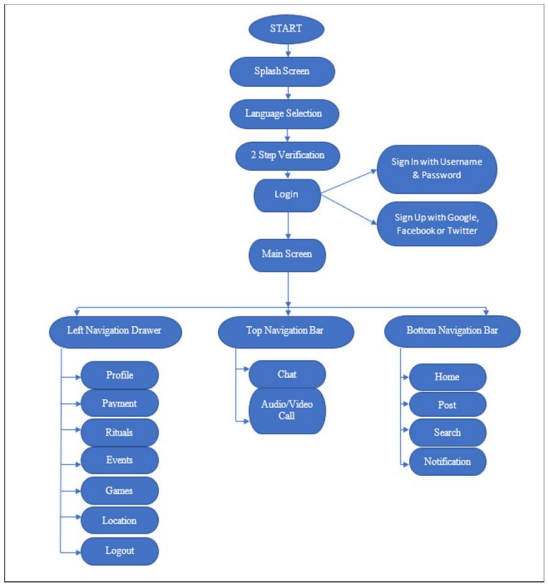
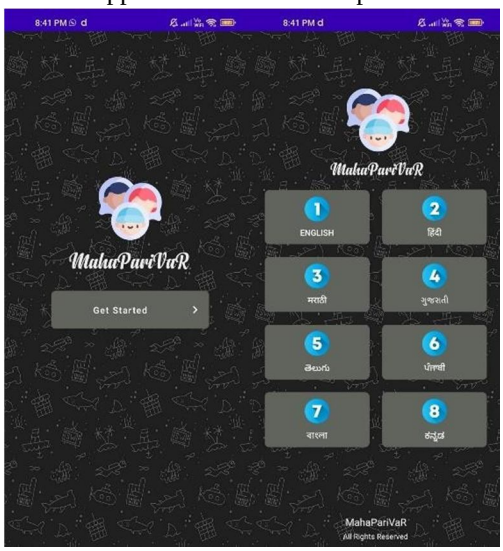


Fig: 3.2. Block Diagram of Mahapariwar App

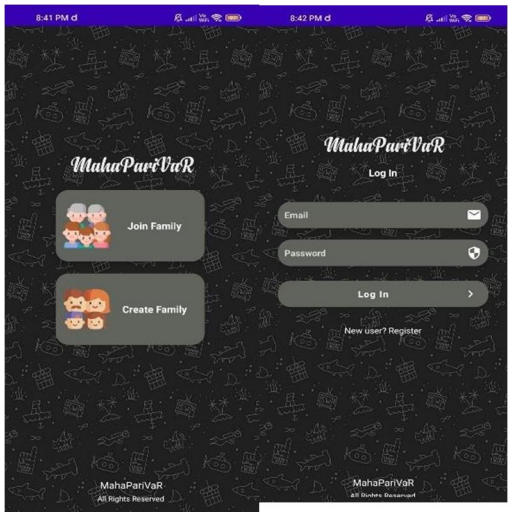
Has three different navigation bar (Left Navigation, Top Navigation, Bottom Navigation) the left navigation includes different sections like profile, payment, rituals, games, location etc [1] the top navigation bar includes chat, audio/video call & the bottom navigation bar includes Home, Post, Search, Notification.[4] In the profile section user can see his/her data with the help of rituals section the users will come to know about rituals of different regional families in the events section user can plan any event like birthdays, marriage etc location section will give the current location of child to the parents and vice versa and also a chat and a audio/video call feature has been provided with the uploading posts [4] a search tab and a members list, users can like the posts or comment on it or they can bookmark it, and lastly notification tab is provided to get notified of new posts, or if anyone joins the family.

IV. INTERFACE DESIGN AND DEVELOPMENT

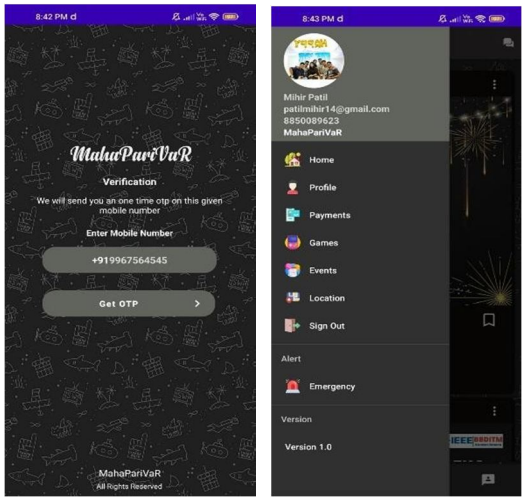
Different tools have been used in the development process of mobile application that are: (i) Android Studio IDE that has been connected with Google Firebase which is used to store real-time database. Firebase uses the JavaScript Object Notation (JSON) tree structure and the data that is been stored is simply represented as a node with a reference key. XML has been used to design the user interface. Below you can see the screenshots of the app that has been developed.



(a) (b)

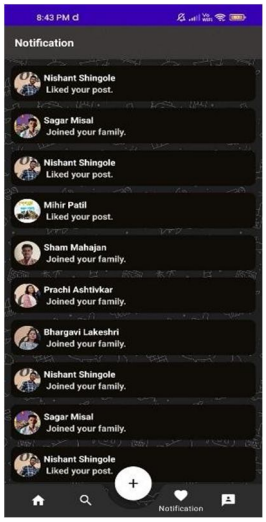

MahaParivaR
Join Family
Create Family
MahaParivaR
Log In
Email
Password
Log In
New user? Register
MahaParivaR
MahaParivaR

(c) (d)

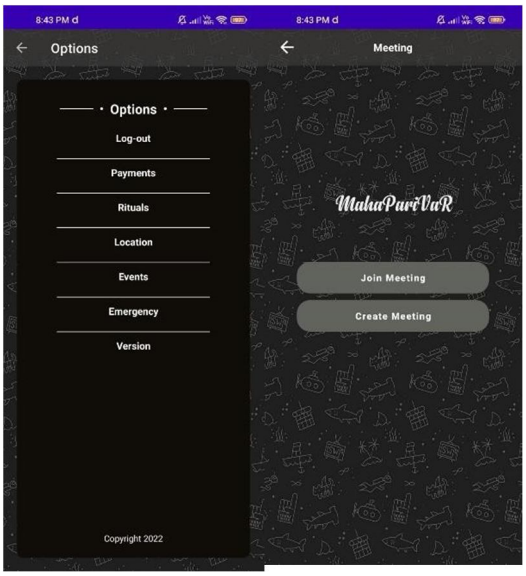

MahaParivaR
Verification
We will send you an one time otp on this given mobile number
Enter Mobile Number
+919967564545
Get OTP
MahaParivaR
Mihir Patil
patilmihir14@gmail.com
8850089623
MahaParivaR
Home
Profile
Payments
Games
Events
Location
Sign Out
Alert
Emergency
Version
Version 1.0

(e) (f)


MahaParivaR
Nishant Shingole
2023
HAPPY NEW YEAR
2 likes
Nishant Shingole
HAPPY NEW YEAR
View All 1 Comments
Mihir Patil
Home


Notification
Nishant Shingole
Liked your post.
Sagar Misal
Joined your family.
Nishant Shingole
Liked your post.
Mihir Patil
Liked your post.
Sham Mahajan
Joined your family.
Prachi Ashtivkar
Joined your family.
Bhargavi Lakeshri
Joined your family.
Nishant Shingole
Joined your family.
Sagar Misal
Joined your family.
Nishant Shingole
Liked your post.
Notification

(g) (h)



(i) (j)

V. CONCLUSION AND FUTURE WORK

After completing the family app project using Android Studio, it can be concluded that designing and developing a mobile app for family members can be a rewarding experience. The app can be a useful tool for family members to stay connected and organized, and can help improve communication and collaboration among family members.

During the development process, various features were incorporated into the app, such as a family calendar, task list, and messaging system, which can help family members stay up-to-date with each other's schedules and tasks [1]. The app also includes a user-friendly interface, which is easy to navigate and use, making it accessible to all family members, regardless of their technical proficiency.

Overall, the project has provided a valuable learning experience, both in terms of technical skills, as well as understanding the needs and challenges of designing and developing a mobile app for families. It is hoped that this app can provide a useful tool for families to improve communication, organization, and collaboration, ultimately leading to stronger and happier family relationships.

As with any project, there is always room for future work and improvements for a family app project using Android Studio. Some potential areas for future work in this research project could include:

1) *Integration with other family-oriented apps:* The family app developed in this project could be integrated with other popular family-oriented apps, such as parenting apps, budgeting apps, or meal planning apps. This integration could provide a more comprehensive solution for families to manage their daily lives.
2) *Enhanced privacy and security features:* While the app developed in this project included some basic security features, such as user authentication and encryption of data, there is still room for improvement in terms of privacy and security. Future work could explore the use of biometric authentication, such as fingerprint or facial recognition, as well as stronger encryption protocols.
3) *Personalization options:* The app developed in this project provided a standard set of features, which may not be applicable to every family's needs. Future work could explore the addition of personalization options, such as the ability for users to customize the app's interface or select which features to display.
4) *Compatibility with other platforms:* While the app developed in this project was designed specifically for Android devices, future work could explore the development of an iOS version of the app or the use of cross-platform development frameworks.

Overall, there are many potential areas for future work and improvements for a family app project using Android Studio. These enhancements could provide families with even more tools to stay connected, organized, and collaborative, ultimately leading to stronger and happier family relationships.

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue V May 2023- Available at www.ijraset.com

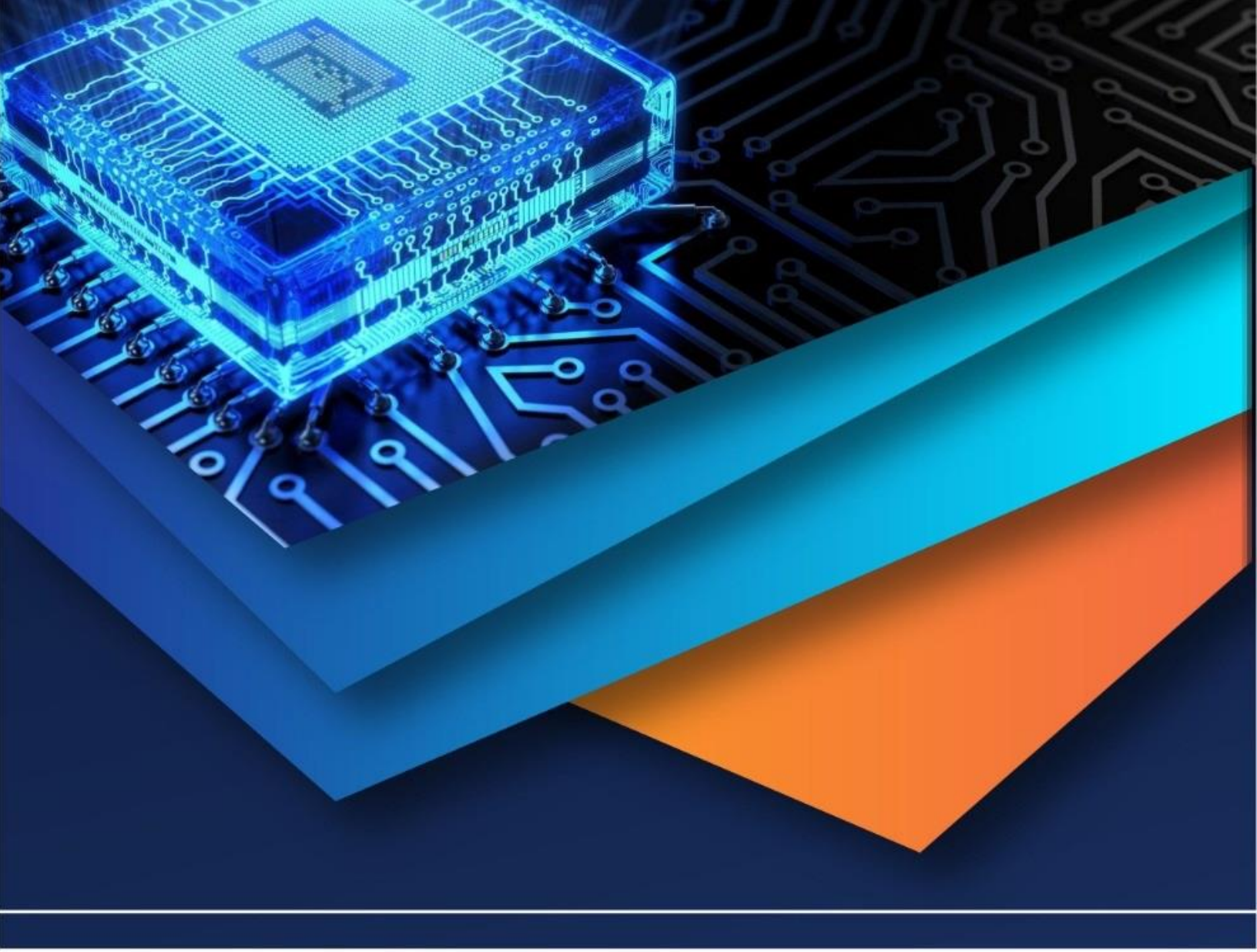
VI. ACKNOWLEDGEMENT

"We would like to express our sincere gratitude to our supervisor, for providing us with invaluableguidance and support throughout the course of this research project. We would also like to thank our colleagues and classmates for their insightful discussions and feedback. Furthermore, we would like to express our appreciation to the participants who generously gave their time and energy to participate in this research project. Their contribution was instrumental in making this research project a success. Finally, we would like to thank our families and friends for their unwavering support and encouragement throughout the project.

REFERENCES

[1] Fadhilah, R., & Widyaningrum, T. (2021). Design and Development of Family Financial Management Application for Android. Journal of Physics: Conference Series, 1836(1),012042.
[2] Rostianingsih, E., & Daryanto, A. (2020). Design and Development of Family Health Management Application using Android. Journal of Physics: Conference Series, 1521(2),022044.
[3] Rehman, A., & Javaid, M. (2020). Design and Development of Family Safety and SecurityApplication for Android. In International Conference on Intelligent Human Systems Integration (pp. 130-136). Springer, Cham.
[4] Lee, K. (2018). Family communication and information sharing through mobileapplications. Journal of Family Communication, 18(2), 108-123.
[5] Naughton, P. (2019). Apps for family life: a review of apps for families with young children.Journal of Children and Media, 13(1), 84-100.
[6] Liu, C., Lu, X., & Xu, H. (2018). A study of theusage of family apps: behavior and motivation.In Proceedings of the 2018 CHI Conference onHuman Factors in Computing Systems (p. 145).ACM.
[7] Wang, J., Lin, Y., & Hsu, S. H. (2019). Perceived usability and social influence of family health management apps: Themoderating effects of family function. International Journal of Medical Informatics, 131, 103950.
[8] Tong, X., & Hu, F. (2020). Research on the Development Strategy of Family Education APP in the Mobile Internet Era. Journal of Educational Technology Development and Exchange, 13(13), 72-78.
[9] Zhao, X., Liu, J., & Chen, X. (2021). A Study on the Design and Development of Family Life Service Platform Based on Android. Journal of Physics: Conference Series, 1836(1), 012050.
[10] Naji, A. W., & Rahim, A. S. A. (2021). Development of family management mobile application for android platform. International Journal of Interactive Mobile Technologies (iJIM), 15(6), 222-236.
[11] Kim, J. H., Kim, J. G., & Kim, H. J. (2018). Development of a mobile app for family caregivers of individuals with dementia. Journal of Korean Academy of Community Health Nursing, 29(1), 103-112.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)