

College Companion App

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Abstract

Nowadays, Educational mobile Apps directly target the psychology of the students which helps students to understand and grab the information from a different perspective. The aim of the app is to guide the students and keep them updated about what's happening in the class. Using mobile apps students learn from any geographical location but has also helped them use the technology at their disposal in judicious ways. Students can now dedicate more time to read up and understand their subjects better. In this app, the student can get the announcement regarding any examinations, holidays, etc. Also, the student can get the notes of their respective subjects.

Keywords: Android Studio, Firebase, Figma

1. INTRODUCTION

In today's world, mobile apps render a good platform for banking, education, reading etc. Designing and developing of new mobile apps for specific tasks would further make services more user friendly. Nowadays Mobile apps most widely used for education and reading. Mobile apps allow users to have easy, functional access to information, services that they need in real-time and are optimized for hands on interaction. This companion app is to guide the students and keep them updated about what's happening in the class. student can get the announcement regarding any examinations, holidays, etc. Students can receive notices about upcoming exam result, and other events. Also, the student can get the notes of their respective subjects. Also, the previous day absentees don't know what happened in the class or laboratory etc. Newly join students feel difficulty to find their way to their classes, laboratory etc., in their department block. It is like an instructor app for the students for viewing the layout of their department, downloading notes, seeing results etc.

2. EXISTING SYSTEM

With the increasing demands of physical and psychological well-being, and education-related applications. This is a new kind of app which update the students about each and every event happening inside the classroom and inside the college campus. This app is developed using Android Studios and Figma.

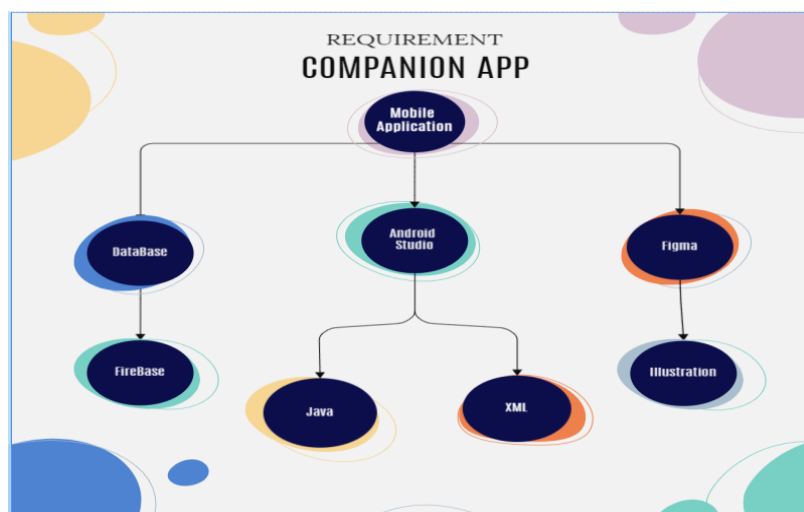


Figure 1: Requirement App

3. PROPOSED METHODOLOGY

The main importance of this projects to guide newly join students in colleges with help of this app. This app has login page and signup page .With the login page students can login with their reg no and email id. Next, this app has an announcement to notify the students about the classroom updates and events happening inside the college campus. It also contains class notes of each subject for all year students. Students can see the exam results which are updated by the respective staffs through this app .We can view the IT block in a layout with help of this app and we can get the details about where the classes and labs etc.

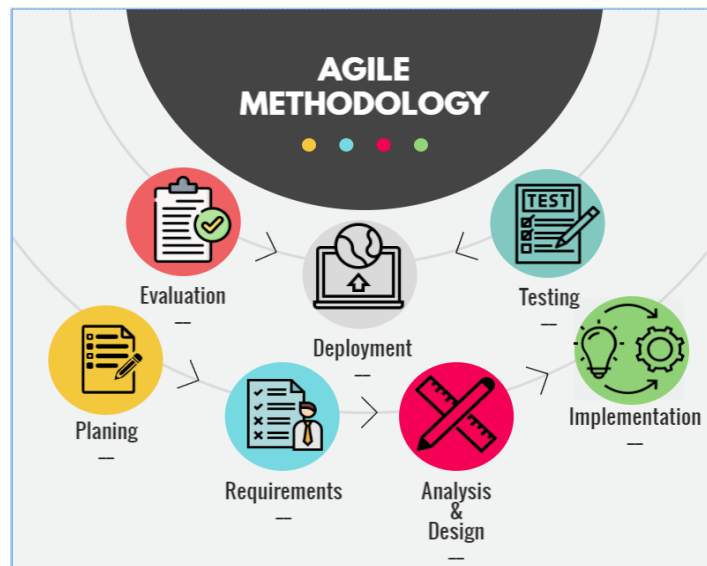


Figure 2: Agile Methodology

3.1 Methodology Stages:

3.1.1 Planning:

Project planning plays an essential role as a helping guide for team members who are developing a project. we plan to design a mobile application for education purpose.

3.1.2 Requirements:

Requirements used in this project are android studio, firebasefigmaillustrator.

3.1.3 Analysis and design:

For designing,figma illustrator is used for the project. Figma illustrator is used only for designing purpose.

3.1.4 Implementation:

With the help of requirements and the design, implementation

Is done and app is developed.

3.1.5 Evaluation:

Evaluation is a systematic and objective assessment of an ongoing or complete project. In this project Evaluation is done

3.1.6 Deployment:

Deployment is a process of making the application work on a device. Therefore, Deployment is done output is developed

3.2 Architecture Diagram:

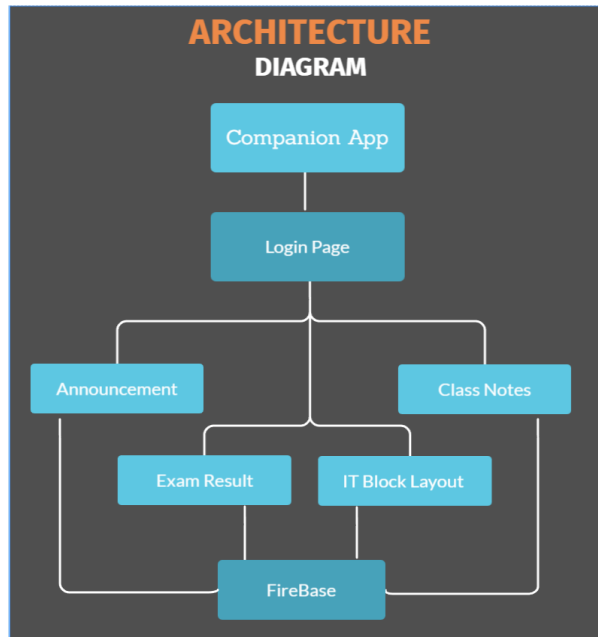


Figure 3: Architecture Diagram

4. MODULES

4.1 Android studio:

For making a mobile application, android studio is mainly used for developing. It consists of java files, xml files and so one Using xml language, we can front end design a app.Using java language, we can function an app.

4.2 Firebase database:

Firebase uses what is known as a NoSQL, database for storing data in a real time database. it lets for storing and sync data between the users in real time, we use thisdatabase for storing students' details.

4.3 Figma:

It is an illustrator used for sketch and illustrator. We use this illustrator mainly for designing purpose.

5. IMPLEMENTATION

This application is primarily utilized for the understudies from saving timing intricacy. Subsequently this application is utilized for accumulate new data about class for understudies and feature the course to every under studies

6. CONCLUSION

This companion app is designed to assist students and to keep them informed about what is going on in class. Students can receive notices about upcoming exams, result, holidays, and other events. Additionally, students can obtain their particular course notes. Also, absentees from the prior day can gain the details of class or in the laboratory notes. New admissions will have trouble navigating their department block to their classes, laboratories, and other facilities. It's similar to an instructor app for students to view the structure of their department, download notes, and see results, among other things.

7. RESULT

An multi tasker functioned application, provides notification regarding college activities, storage of smart studies data materials is managed end of the day, directing navigation, a complete productive student friendly pocket android application.

REFERENCES

- [1] Zigurd Menniaks, "Professional Android 4 Application Development" by Reto Meier "Programming Android Java Programming for the New Generation of Mobile Devices"
- [2] Ed Burnette, "Hello, Android Introducing Google's Mobile Development Platform"
- [3] Mitchell Schuler, "Android Programming: Mastering Course for Beginners Quick Start to Develop Your Own App"
- [4] Sam Key, "Android Programming in a Day! The Power Guide for Beginners In Android App Programming"
- [5] Dawn Griffiths and David Griffiths, "Head First Android Development: A Brain-Friendly Guide"
- [6] Moroney, Laurence "The Definitive Guide to Firebase: Build Android Apps on Google's Mobile Platform"
- [7] Sharanyaa, S., S. Vijayalakshmi, M. Therasa, U. Kumaran, and R. Deepika. "DCNET: A Novel Implementation of Gastric Cancer Detection System through Deep Learning Convolution Networks." In 2022 International Conference on Advanced Computing Technologies and Applications (ICACTA), pp. 1-5. IEEE, 2022.
- [8] Cheng, Fu, "Build Mobile Apps with ionic 4 and firebase: Hybrid Mobile App Development"
- [9] M. Sumithra and Dr. S. Malathi, "A Novel Distributed Matching Global and Local Fuzzy Clustering (DMGLFC) FOR 3D Brain Image Segmentation for Tumor Detection", IETE Journal of Research, doi.org/10.1080/03772063.2022.2027284, 2021
- [10] B.Buvanswari and T.Kalpalatha Reddy, "A Review of EEG Based Human Facial Expression Recognition Systems in Cognitive Sciences" International Conference on Energy, Communication, Data analytics and Soft Computing (ICECDS), CFP17M55-PRJ:978-1-5386-1886-8", August 2017.
- [11] Chethana, C., Subbiah Swaminathan, S. Sharanyaa, E. Sathish, R. Prathipa, and Anuradha Thakare. "Application of Reverse Engineering in the Process of Utilization of Human Brain in Artificial Intelligence." Journal of Optoelectronics Laser 41, no. 3 (2022): 89-93.
- [12] M. Sumithra and Dr. S. Malathi, "Modified Global Flower Pollination Algorithm-based image fusion for medical diagnosis using computed tomography and magnetic resonance imaging", International Journal of Imaging Systems and Technology, Vol. 31, Issue No.1, pp. 223-235, 2021
- [13] K. Sridharan, and Dr. M. Chitra "SBPE: A paradigm Approach for proficient Information Retrieval, Jokull Journal", Vol 63, No. 7; Jul 2013
- [14] Sharanyaa, S., P. N. Renjith, and K. Ramesh. "Classification of Parkinson's disease using speech attributes with parametric and nonparametric machine learning techniques." 2020 3rd International Conference on Intelligent Sustainable Systems (ICISS). IEEE, 2020.
- [15] M. Sumithra and Dr. S. Malathi, "3D Denselex NET Model with Back Propagation for Brain Tumor Segmentation", International Journal Of Current Research and Review, Vol. 13, Issue 12, 2021.
- [16] B.Buvaneswari and Dr.T. Kalpalatha Reddy, "EEG signal classification using soft computing techniques for brain disease diagnosis", Journal of International Pharmaceutical Research, ISSN : 1674-0440, Vol.46, No.1, Pp.525-528, 2019.

- [17] Sharanyaa, S., P. N. Renjith, and K. Ramesh. "An Exploration on Feature Extraction and Classification Techniques for Dysphonic Speech Disorder in Parkinson's Disease." In *Inventive Communication and Computational Technologies*, pp. 33-48. Springer, Singapore, 2022.
- [18] K. Sridharan , and Dr. M. Chitra "Web Based Agent And Assertion Passive Grading For Information Retrieval", *ARPN Journal of Engineering and Applied Sciences*, VOL. 10, NO. 16, September 2015 pp:7043-7048
- [19] M. Sumithra and Dr. S. Malathi, "Segmentation Of Different Modalities Using Fuzzy K-Means And Wavelet ROI", *International Journal Of Scientific & Technology Research*, Vol. 8, Issue 11, pp. 996-1002, November 2019.
- [20] Sharanyaa, S., S. Lavanya, M. R. Chandhini, R. Bharathi, and K. Madhulekha. "Hybrid Machine Learning Techniques for Heart Disease Prediction." *International Journal of Advanced Engineering Research and Science* 7, no. 3 (2020).
- [21] M. Sumithra and S. Malathi, " A Survey of Brain Tumor Segmentation Methods with Different Image Modalities", *International Journal of Computer Science Trends and Technology (IJCST)* – Vol. 5 Issue 2, Mar – Apr 2017
- [22] B.Buvaneswari and Dr.T. Kalpalatha Reddy, "High Performance Hybrid Cognitive Framework for Bio-Facial Signal Fusion Processing for the Disease Diagnosis", *Measurement*,ISSN: 0263-2241, Vol. 140, Pp.89-99,2019.
- [23] Sharanyaa, S., and M. Shubin Aldo. "Explore places you travel using Android." In *2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT)*, pp. 4796-4799. IEEE, 2016.
- [24] M. Sumithra and Dr. S. Malathi, "A Brief Survey on Multi Modalities Fusion", *Lecture Notes on Data Engineering and Communications Technologies*, Springer, 35, pp. 1031-1041,2020.
- [25] Sharanyaa, S., and Madhumitha RP. "Eyeball Cursor Movement Detection Using Deep Learning." RP, Madhumitha and Rani. B, Yamuna, *Eyeball Cursor Movement Detection Using Deep Learning (July 12, 2021)* (2021).
- [26] M. Sumithra and S. Malathi, "A survey on Medical Image Segmentation Methods with Different Modalities", *International Journal of Engineering Research and Technology (IJERT)* – Vol. 6 Issue 2, Mar 2018.
- [27] B.Buvaneswari and Dr.T. KalpalathaReddy,"ELSA- A Novel Technique to Predict Parkinson's Disease in Bio-Facial",*International Journal of Advanced Trends in Computer Science and Engineering*, ISSN 2278-3091,Vol.8,No.1,Pp. 12-17,2019
- [28] K. Sridharan , and Dr. M. Chitra , Proficient Information Retrieval Using Trust Based Search On Expert And Knowledge Users Query Formulation System, *Australian Journal of Basic and Applied Sciences*, 9(23) July 2015, Pages: 755-765.
- [29] Sharanyaa, S., and K. Sangeetha. "Blocking adult account in osn's using iterative social based classifier algorithm." *International Journal of Scientific Engineering and Science* 2, no. 1 (2018): 33-36.
- [30] B.Buvaneswari and Dr.T. Kalpalatha Reddy, "ACPT- An Intelligent Methodology for Disease Diagnosis",*Journal of Advanced Research in Dynamical and Control Systems*,ISSN : 0974-5572,Vol.11,No.4,Pp.2187-2194,2019.
- [31] Sumithra, M., Shruthi, S., Ram, S., Swathi, S., Deepika, T., "MRI image classification of brain tumor using deep neural network and deployment using web framework", *Advances in Parallel Computing*, 2021, 38, pp. 614–617.
- [32] K. Sridharan , and Dr. M. Chitra "RSSE: A Paradigm for Proficient Information Retrieval using Semantic Web" , *Life Science Journal* 2013;10(7s), pp: 418-425