IJARCCE



International Journal of Advanced Research in Computer and Communication Engineering

# Study Buddy Android Application

# Prof. G. P. Mohole<sup>1</sup>, Priti Pawar<sup>2</sup>, Yamini Lambe<sup>3</sup>, Saurav Pachorkar<sup>4</sup>, Vishal Thakare<sup>5</sup>

<sup>1</sup>Prof. Department of Computer Engineering, Jawahar Education Society's, Institute Of Technology, Management And

Research, Survey No 48, Gowardhan , Gangapur Rd, Nashik, Maharashtra, 422222, India.

<sup>2,3,4,5</sup>Department of Computer Engineering, Jawahar Education Society's, Institute Of Technology, Management And

Research, Survey No 48, Gowardhan , Gangapur Rd, Nashik, Maharashtra, 422222, India.

**Abstract**: This study aimed to develop an Android-Based Study Buddy Pairing Application that helps students find a study partner for collaborative studying and peer Tutoring. The researchers used Agile software development life cycle for the development of the application. It is a method that is commonly used in a particular approach to project management that is utilized in software development. It is an iterative work sequence whereas it means that the process for calculating a desired result is by means of a repeated cycle of operations. The evaluation instrument used was Android Development Standard That contains 4 major criteria: visual design and user interaction, functionality, compatibility, performance and stability and security. As a whole, the evaluation result of the Android-based application was found to be excellent in most of its features. The developed application is a good avenue to augment studying between the learner and the tutor. It is recommended that the developed application should add more features such as file and image attachment and a profanity/obscenity filter on chat activity and an effective verification for learner and tutor. The features and functionality of the application is highly recommended to students who need peer tutoring.

Keywords: Android Application, Buddy- pairing, Collaborative Learning, Study Groups.

#### **INTRODUCTION**

The right to free and quality education has been universally recognized since the Universal Declaration of Human Rights in 1948. It is a fundamental possession to human development and a tool that promotes individual freedom and empowerment. Nelson Mandela once said "that education is the most powerful weapon which you can use to change the world" as cited in This is being fulfilled by most governments by providing free education to the poor. But sometimes, the institution tasked to give this right comes shorthanded because of the lack of resources given by the government. This in turn has a negative effect on student's learning. The students who failed to understand a lesson would seek help from their peers to understand it. This was an effective alternative way for the students to learn according to studies.

Study groups are effective in helping students learn more. This was claimed through decades of researches by educational psychologists. Students learn material better when they work together in classroom of collaborative teams. Moreover, stated that forming study to collaborate as groups is a very effective strategy for enhancing the learning of students. This way, students learn from each other through sharing insights and provide them the opportunity to benefit from the talents and knowledge from other members of the group.

This way, cooperative learning could be apparent and could lead to a successful teaching strategy of teachers. The small group or teams of students with different levels of ability can use a variety of learning activities in improving their understanding of the subject. Strategies like this have been acclaimed in where students improve through cooperative learning activities, it helped them understand the concept and gain a long term mastery in skill, abilities and improving learning habits as compared to traditional method

## **PROPOSED SYSTEM**

This study focused on how it can help the students improve their academic performance by suggesting an effective way of studying that is often overlooked.

The developed application will help the students in collaborative studying or peer tutoring or mentoring by matching the app users with other students with common subject interest.

In this way, students from their university or even from different universities can offer their help if they know the subject well and students who help need can improve their academicals Performance by having a peer tutoring and collaborative studying with other students.

The development of the app helps people do their jobs and learn whatever they want, whenever they want with the help of mentor. Study-buddy pairing app is not about formal learning in classrooms, but about augmenting one's learning and

# IJARCCE



International Journal of Advanced Research in Computer and Communication Engineering

# Impact Factor 7.39 ∺ Vol. 11, Issue 4, April 2022

# DOI: 10.17148/IJARCCE.2022.114117

performance, which means to bridge the gaps that exist by learning activities using mobile devices. The application performed well and therefore it is recommended for use.

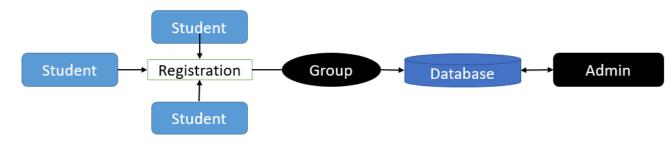


Fig. 2 System Architecture

#### Flow:

1. Student needs to register on application after the registration the groups can be formed.

2. All the groups are present in the database.

3. Students fetch all the data from groups which is present in the database.

4. All the questions are asked by students on groups if any doubts are present.

5. Admin (Teacher) joins the group and they can share knowledge on group and also resolve queries of the students if any.

# **GOALS AND OBJECTIVES:**

1. To improve the academic performance of students.

2. This study aimed to establish a application will help the students in collaborative studying or peer tutoring or mentoring by matching the app users

3. This study also aims to help people do their jobs and learn whatever they want, whenever they want with the help of mentor.

4. This bridge the gaps that exist by learning activities using mobile devices

## MATHEMATICAL EQUATIONS:

System Description: S=I, O, P, S,St, P, Ad, L,H/w, S/w, Failure, Success Where S=System St=Student Ad=Admin L=Location I is Input of system Input I = Input1, Input2

Where,

Input1=Creating the Course Input2=Learning the Course Procedures P= SiN, Cr, Amt

Where,

SiN = Student Sign-in Cr = Course Lists To be Learned Amt = How many amount pay that also show O is Output of system Output O = Output1, Output2,

Where,

Output1=Payment Done Successfully

669



International Journal of Advanced Research in Computer and Communication Engineering

Impact Factor 7.39 
∺ Vol. 11, Issue 4, April 2022

DOI: 10.17148/IJARCCE.2022.114117

Output2=Course Is Available For Learning H/w is a Hardware requirement. H/W= smart phone, OS

S/w is a Software requirement. S/W= Android Studio, SDK, Database: Mysql

Failure= If the Payment not done Successfully OR if the Payment Debited from the bank and Course is not available Success= Successfully the Course has been assigned to the Specific Person

#### FIGURE AND TABLE

Phase No	Description	Class	Result
1	Notes / question upload	Image / Message	Notes/ questions Upload to the System
2	Process	Message	Message Processing can Apply
3	Perform	AlgorithmProcess	Apply Machine learning approach Technique
4	Poverty Prediction	Got Answers / Mentoring / solutions	Here we get final result

Table 1.

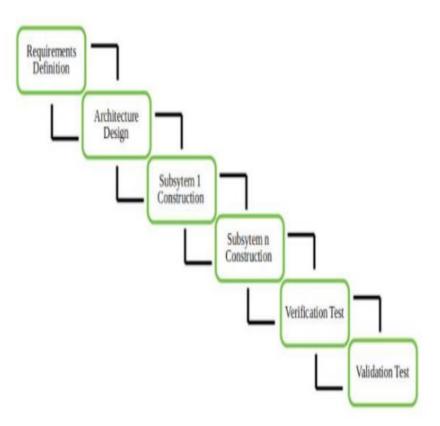


Fig. 2 INCREMENTAL MODEL.

# APPLICATIONS

- 1. It is user friendly application.
- 2. Students fetch all the data from groups which is present in the database.
- 3. This bridge the gaps that exist by learning activities using mobile devices.
- 4. It is flexible to use.



# International Journal of Advanced Research in Computer and Communication Engineering

Impact Factor 7.39  $\ensuremath{\,\approx\,}$  Vol. 11, Issue 4, April 2022

DOI: 10.17148/IJARCCE.2022.114117

### CONCLUSION

This study focused on how it can help the students improve their academic performance by suggesting an effective way of studying that is often overlooked. The developed application will help the students in collaborative studying or peer tutoring or mentoring by matching the app users with other students with common subject interest. In this way, students from their university or even from different universities can offer their help if they know the subject well and students who help need can improve their academicals performance by having a peer tutoring and collaborative studying with other students. The development of the app helps people do their jobs and learn whatever they want, whenever they want with the help of mentor. Study-buddy pairing app is not about formal learning in classrooms, but about augmenting one's learning and performance, which means to bridge the gaps that exist by learning activities using mobile devices. The application performed well and therefore it is recommended for use.

#### ACKNOWLEDGMENT

It gives us great pleasure in presenting the preliminary paper report on "Slum Analysis Based On Satellite Mapping".

We would like to take this opportunity to thank my internal guide **Prof. G.P. Mohole** for giving me all the help and guidance we needed. We are really grateful to them for their kind support. Their valuable suggestions were very helpful. We are also grateful to **Prof. D.B. Sisode**, Head of Computer Engineering Department, JES'ITMR, Nashik for his indispensable support, suggestions as well as our principal **Dr. M. V. Bhatkar**, JES'ITMR, Nashik who gave us the golden opportunity to present this paper.

In the end our special thanks to Technical Staff Members for providing various resources such as laboratories with all needed software platforms, continuous Internet connection, for our paper.

#### **REFERENCES:**

- 1. Journal of Environmental Science, Computer Science and Engineering Technology 2020, Retreived from https://www.researchgate.net/publication/341930600 Development and Evaluation of Study Buddy Pairing Application for Android.
- 2. . United Nations (n.d.). Universal Declaration of Human Rights. Retrieved from https://www.un.org/en/universal-declaration-human-rights/index.html/
- 3. A.Duncan, Education: The Most Powerful Weapon for Changing the World 2013, Retreived from https://blog.usaid.gov/2013/04/education-the-most-powerfulweapon/
- 4. N. Schoenherr, Discovering why study groups are more effective,2006. Retrieved from https://source.wustl.edu/2006/07/discovering-why-study-groupsaremore-effective
- 5. L. Evidente, E. Estimo L. Aranador, Collaborative Learning in Small Group ~ Discussions and Its Impact on Resilience Quotient and Academic Performance. JPAIR Multidisciplinary Research Journal, 7(1).2012, Retrieved from
- 6. A.D.Gamit, J.A. Antolin and A.G.Gabriel, The Effects of Cooperative Learning in Enhancing the Performance Level of Grade-10 Mathematics Students in Talavera National High School in the Philippines. Journal of Applied Mathematics and Physics, 2017, 5, 2386-2401. https://doi.org/10.4236/jamp.2017.512195
- 7. J. Mateo, Teacher-student ratio improves in public schools,2018. Retrieved from https://www.philstar.com/other-sections/education-andhome-/2018/03/29/1801232/teacher-student-ratio-improves-public-schools
- 8. Core app quality. (n.d.). Retrieved from https://developer.android.com/docs/qualityguidelines/core-app-quality