

COLLEGE-ERP ANDROID APPLICATION

Vaishali Ramesh Rathod

vaishalirathod8189@gmail.com

Suhani Sanjay Somase

suhanisomase@gmail.com

Sneha Hiraman Bhoj snehabhoj04@gamil.com Shravani Rajesh Chavan shravaniraj1285@gmail.com

Prof.R.S.Derle

rahul.derle@gmail.com

Abstract—most students of University of Tourism Technology and Business Studies are struggling with accessing class teachers' study material and self-assessment from e-learning platforms. The researchers used qualitative methods using an observation and an interview. There searchers used qualitative methods by conducting an interview with the students of UTB. An observation was also used to get first-hand information on the access of learning material from-learning platforms. A prototype was designed and distributed between students of a data mining course in order to get their feedback. There were 388 BIT Students Population. To conduct research, Solving's formula was applied where researchers found 20 BIT Students as a sample size. Prototype of a mobile-based learning application as developed on Android Platform using Java programming language and distributed among students for feedback. Students were interviewed whoever had an experience of distributed prototypes. Interview response was analyzed by using Microsoft excel. The finding was that mobile-based learning could be one of the bestmodules of blended learning technique. The researchers recommend the university of technology and business studies to integrate it with their e learning platform. This mobile learning application intends to supplement the current traditional classroom and e-learning systems. It makes learner sat anytime at any place they want to get the knowledge without having the Internet in their android mobile device. Future researchers may link between mobile based learning applications and other aspects of e-learning platforms consist Notes, Assignments, Notice Board, Library, Attendance, Fees, etc. Keywords: Mobile Learning, Android Platform, Java Programming Language,

Keywords—(Mobile Learning, Android Platform, Java Programming Language, Mobile Learning Application, eLearning)

I. INTRODUCTION

The use of computing technology for learning has been observed in various ways. In the past few decades, electronic learning or eLearning has been adopted and used by public schools and university students in many parts of the world. They were familiar with both the e learning terminology and technology but in recent years, the rapid progress in mobile technology has created a new area, which is known as mobile learning technology. E-learning is an android based Learning Management System that helps students to interactively learn. This android application also allows the user/student to view assignments, notes on subjects he/she selected. Learning Management System is a broad term used to describe software tools designed to manage user learning interventions and provideaccess to online learning services for students, teacher, and administrator. A software system that allows the development and delivery of educational courses using the Internet as a delivery system. A Learning Management System is a Software application for the administration, documentation, tracking, reporting and delivery of electronic educationaltechnology (also called e-learning). Using Webservices for mobile learning applications helps the process of development by providing a standardized way of communication between mobile clients and servers.

II. LITERATURE SURVEY

A learning management system is seen as a software platform which automates many of the processes associated with learning. It is a management software package enabling the delivery of learning content, resources and activities and also handles the associated administration tasks. With the extra ordinary increase in information, increased student variety, new learning theories and ready access to the internet, teachers in today's classrooms are being presented with an opportunity to transform the learning in their classrooms from a traditional transmission model to a studentcentered model, where students are more responsible for their own learning. Many of the papers reviewed suggest that in order to do this, schools need to adopt a studentcentered approach where students can become adept at finding, analyzing, organizing, evaluating, internalizing and presenting new information. E learning can provide unprecedented opportunities for this to happen. Computers can support knowledge construction, learning-by-doing, conversing and reflection. But managing all this in a student-centric environment is a complex task that might be made more manageable by the implementation of a Learning Management System.



III. WORKING

The application consists of the real time e-learning concept that provides a reliable mobile learning application. This application basically consists of four parts: the first part has teachers part where the learning contents are placed.in second part notes and/or exercises are available for student .In existing system E-Learning has also been incorporated to support this way of learning. In some cases both the systems work the same and they provide many services to the user. But because of some problems they lose their popularity. In the case of the traditional system ,students will only learn when the teacher is available but cannot do extra studies since the materials are only what are provided in class. In E-Learning, the drawback comes in when student are not able to do extra practical, self-assessment. In proposed system admin can login with their provide username and password after successfully login admin can add teachers and students. In Teacher panel teacher can login username and password by provided admin .after teacher login teacher can add notes ,assignments, video lectures and exercise for each subject .In student panel student can view assignments, notes ,lectures which is uploaded by teacher .student can view all e-learning content anytime.

IV. BLOCK DIAGRAM



(Fig.1).Block Diagram

V. AREA OF PROJECT

This project is based on the database, web-based techniques. To keep the records in the database it uses MySQL software which is one of the best and the easiest databases to keep information. This project uses Android as the front-end android based application which is an java based Programming and has connectivity with MySQL.

This system is developed using Android Studio. This is the Android based application. In this system Admin gets logged in by valid username and password. Admin can add teachers, add students, The Admin can view all teachers and students. In this system teachers can upload subject notes, assignment, Video lectures and also students can view assignment, notes and video lectures of each subject.

VI. STRUCTURAL DIAGRAM



(Fig.2)Application Flow

VII. MODULE

- 1) Signup
- 2) Creating profile
- 3) Login
- 4) Admin
- 5) Teacher
- 6) Student
- 7) Add Notes
- 8) Add Assignment
- 9) Library
- 10) Fees Report
- 11) Notice Board
- 12) Attendance
- 13) Leave Management

Hardware Requirement for Development of Project: (minimum)

- 1. Processor : Intel core i3
- 2. Ram: 4 GB (min)
- 3. Hard disk : 64GB

Software Requirement for Development of Project: (minimum)

- 1. Operating System: Microsoft Windows-7.
- 2. Software Package: Android Studio, SQLite, MYSQL, PHP, HTML, CSS, JS, BootStrap



VIII. DFD DIAGRAM



(Fig.3).LEVEL 0



(Fig.4).LEVEL 1

IX. SnapShots:

1.Principal Panel:



Fig 1.1 Login Page

Welcome Principal				Welcome: admin user
Deshboard	View	Teacher		
🛦 MyProfile				
🛔 Head Of Dept	SR	Teacher Name	Department	
▲ Teachers	1	Sai Jadhav	Computer Engineering	
	2	Pratik Kadam	Computer Engineering	
	3	Atharva Jadhav	Computer Engineering	
Teacher Leave	4	Pratik Kadam	Computer Engineering	
Timetalla	5	Atharva Jadhav	Computer Engineering	
	6	Rahul Derale	Computer Engineering	
Adievenents	7	Yashashree	Mechanical Engineering	
	8	Prachi Pabil	civil Engineering	
	9	Krutika Pawar	Electrical Engineering	

Fig 1.2 View Teacher



Fig 1.3 Principal Dashborad

Welcome Principal	≣ P	incipal Pane							Welcome: adm		
🗆 Deshboard	1	iew HOD)							Addit	
🛦 Ny Profile	-									_	
Head Of Dept							joning				
Teachers	SR	name	photo	Username	phone	enail	date	qualification	adhar No	gender	2
& Students	1	Prof. M.D. Suryawanshi		HODEE	9420474828	milind suryawanshi tiligginal com	2014- 07-01	M.E.POWER SYSYTEN	708746935595	nale	1
Notice			Coversition of the								
Teacher Leave	2	ProE.S.N.	2	HODCE	9970157507	saurabhogale2150@gmail.com	2017-	BE.CE.	508375995759	male	
) Tinutable		oder.					05.01				
Achievements	3	Prof.Shaikh ILLPatel	2	HODCO	8208729762	shaikh.ifat09@gnail.com	2021- 07-26	M.E.Computer, MSc. Mathematics	635496229889	female	
) Galary		DODEST	-	refeestly	0006033600	of walk 2010 Repuil on	2115	MEREA		mala	
	ľ	DARADE		study	NOV1180	arengevoggiateon	01-66	Provide a		inte	
	5	Prof. A.A.Sinare	2	HODINE	9503529622	sivareanoi@gnal.com	2017- 06-17	BE (Mech.), ME (Heat	289277740757 ctivate Wind	male DINS	

Fig1.4 Hod View



2. HOD Panel:



Fig 2.1 HOD Login page



Fig 2.2 HOD Panel:

Welcome Admin	≡ Admin Panel		
Dashboard	Add Teach	ner	
🔺 My Profile			
🍐 Teachers	Department	Computer Engineering ~	1
Students	Name	Gaurav Handge	
🚽 Add Class	Photo	Choose File No file chosen	
🕫 Add Subjects	Cander	Male	
Timetable	Genoer	⊖ Female	
Setting	Phone	9876543210	l.
\varTheta Logout	Email	gauravhandge@gmail.com	
	UserName	gauravhandge	
	Password	handge 124	
	Qualification	ME.CO	
		Submit	

Fig 2.3 Add Teacher

Deshboard		Vie	w Teacher									ofText
		-										
		SR NO	Name	Photo	Department	Enail	Gender	Phone	Usemame	Password	Qualification	Actio
	5	ţ	Sei Jachav	2	Computer Engineering	sajachav@gnail.com	female	8500144411	sijehar	sijathar	ME	8 0
Add Class												
		2	Pratik Kadam	<i>n</i>	Computer Engineering	pratik@gmail.com	male	9875435685	pratikkadam	pratikkadam	ME Computer	8 6
		3	Athania Jathav	2	Computer Engineering	athanajadhar@gmail.com	nale	9653256889	atherva	athania	BE	8 8
	3	4	Pratik Kadam	8	Computer Engineering	pratik@gmail.com	nale	9875435685	pratikkadam	prətikkədəm	ME Computer	80
		5	Athania Jadhai	2	Computer Engineering	athanvijether@gmail.com	nale	8058058308505	sh	athu	ME Computer	8 2
		5	Rahul Derale	8	Computer Engineering	snehabhojö4@gmaiLcom	male.	1234567890	rahulderale	rahulderale	MECO	

Fig 2.4 Teacher List:

Welcome HOD						
д Dashboard	Vie	ew Fees				Address
	-					
	58	Department Name	Class Name	Title	image	Action
		Computer Engineering	TYOA	shot	AB	
					COMPARE	
	2:	Computer Engineering	TYON	TYCH Fees List	121	
					-	
	×					

Fig 2.5 Fee section:

Welcome HOD	≡ Log				Welcome: HODCO
🗆 Dashboard	Vi	ew Timetable			Add New
	-				
1 Teacher	SR	Department Name	Class Name	image	Action
Student	2 1	Computer Engineering	тусм		• 8 2
Add Class					
Add Subjects					
L Teacher Leave				Sector 2 (a)	
L Student Leave					
Timetable	•				
Add Fees					
Add Notices					
Student Fees					
Change Password					Activate Windows So to Settens to actuate Windo
a from the					

Fig 2.6 Time Table



3. Teacher Panel:



Fig 3.1 Teacher Login

Dashboard	Add Subje	ct		8
🛔 My Profile				
La Teachers	Department	-Select Department -	¥	
Students	Class	-Select class -	•	
🖬 Add Class	Teacher *	-Select Techer -	*	
Add Subjects	Subject Name			
0 Timetable				
• Setting	Subject Code			
		Submit		
	-			

Fig 3.4 Add Subject

Welcome Admin	≡ Admin Panel	Welcome: admin
Dashboard	Add Student	Back View All
🛔 My Profile		
Laters	Select Class - v	
Students	Name	
🗮 Add Class	Entrollment No	
🗭 Add Subjects	Addhar No	
• Timetable		
• Setting	Phone	
🖲 Logout	Password	
	Submit	

Fig 3.2 Add Student

Welcome Teacher	≡ Teacher Pa			Welcome: saijadhav 🧕
🛛 Dashboard	Subject			
L My Profile				
🖶 My Class	SR NO	Department Name	Class Name	Subject Name
🖻 My Subjects	1	Computer Engineering	ТҮСИ	PWP
/ Notes	2	Computer Engineering	TYCM	MAD
Video lecture	3	Computer Engineering	FYCH	PCI
🖸 Assignment				
/ syllatus				
• Setting				
• Logout				

Fig 3.5 Subject

Welcome Teacher	≡ Tea	icher Pani	el			Welco	ome: saijadhav 🔏
🛛 Dashboard	м	v Leave	1				Add New
1 My Profile	-		20				
🖶 My Class	SR	Type	Form Date	To Date	HOD Status	Principal Status	Reason
🕫 My Subjects	t	α	2024-02-20	2024-02-22	waiting for approval	Approved	Test
	2	٧L	2024-03-06	2024-03-06	waiting for approval	waiting for approval	
Video lecture							
🕼 Book							
🛢 Syflabus							
Leave Management							
🛔 Timetable							
Student Leave							
Lonot							





Fig 3.3 Dashborad



4. App For Teacher

5:28	:∎: 4 .00	₩ *fiil 💷 52%
Sai tea	Jadhav cher	≡
My Class	Attendance	Leave

Fig 4.1 Home Page



Fig 4.2 Teacher details



Fig 4.3 Teacher Leave



Fig 4.4 Student List



5. App For Student:



Fig 5.1 HomePage



Fig 5.2 Student Login Page

10:40 рм	ቶ 🔹	Ø		a wat	a 44%
Log	gin				
+91	Phone				
	LOGIN				
	<u>Having frouble १ (</u> Helpline Number +91 9	Call	<u>us</u> .	33	
			\triangleleft	1	7

Fig 5.3 Login Page



Fig 5.4 All Module



Control Spark 2024 Image: Control Image: Contro Image: Contro <th>9:49 🖸</th> <th>😰 ¥ 🍙 🕍 🗄 💷 55% 🛢</th>	9:49 🖸	😰 ¥ 🍙 🕍 🗄 💷 55% 🛢
Spark 2024 Carnival notice ▲ ▲	\leftarrow Student Notice	
	Spark 2024	Carnival notice
	III <u>O</u>	<

Fig 5.5 Notice Borad



Fig 5.7 My Classroom



Fig 5.8 Student Detail



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X. **ADVANTAGES**

- 1. saves time and money
- E-learning leads to better retention 2.
- 3. The studying material can be accessed unlimited number of times
- 4. Easy to access
- 5. User Friendly

LIMITATION XI.

- 1. **Require Internet Connection**
- Requirement of Android smartphone 2.

XII. APPLICATION

- 1. This system is useful for Schools and colleges
- 2. This system is used by student to view E- learning content
- 3. Attendance Management: The app can allow students to mark their attendance digitally, reducing paperwork and making it easier for professors to track attendance records.
- 4. Exam Scheduling: The app can provide a platform for students to view their exam schedules, receive notifications about upcoming exams, and access study materials.
- 5. Communication and Notifications: The app can serve as a communication platform between students, teachers, and administrators, enabling them to send messages, announcements, and important notifications.
- Student Performance Tracking: The app 6. can allow students to view their academic progress, including grades, GPA, and class rankings.
- 7. Library Management: The app can provide access to the college library catalog, allowing students to search for books, check availability, and even reserve or renew books.
- 8. Event Management: The app can feature an highlighting events calendar, important dates, workshops, seminars, and other college events.

FUTURE SCOPE

Integration with Other Systems: Expanding the integration capabilities of the app to work with various educational systems such as Learning Management Systems (LMS), library databases, and administrative software can enhance its utility.

- Virtual Reality (VR) and Augmented Reality (AR): Incorporating VR and AR features for virtual campus tours, interactive learning, or laboratory simulations could be a significant advancement.
- Implementing AI-driven chat bots for answering common queries and providing support services can be avaluable addition.

CONCLUSION

The development of mobile applications is not an easy task. In this system we present the main steps in development of a mobile learning application for Android. The system developed includes the testing module. The testing result showed that the system worked correctly. Evaluation on the prototype will be conducted to assess the learning efficiency and effectiveness of this system. This system will persist to grow and the future work will include improving the content of the system by adding more modules; real time-class assessment quiz; a chat forum and more interactive learning options for the system. Continuous enhancement of the system to continuously suit the students' needs and further experiments will be conducted for a longer period of time.

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