# BIIT TEACHER'S FOLDER MANAGEMENT SYSTEM



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Barani Institute of Information Technology
PMAS Arid Agriculture University, Rawalpindi

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# **BIIT TEACHER'S FOLDER MANAGEMENT SYSTEM**



# A report submitted in partial fulfillment of the Requirements for the degree of Bachelor of Science in Computer Science Bachelor of Science in Information Technology (BSCS/BSIT)

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# **CERTIFICATE**

It is certified that the contents and forms of thesis entitled "BIIT Teacher's Folder Management System" submitted by Muhammad Usman, Abu Bakar Bin Khalid and Hassan Ikram have been found satisfactory for the requirements of the degree.

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Finally, I am grateful to my parents who prayed for me, encouraged and supported me all the way.

May ALLAH bless all these people (Ameen)

#### **ABSTRACT**

The project entitled "BIIT Teacher's Folder Management System" is a crossplatform mobile and web application released for Android IOS and Web platform which offers teachers to maintain their educational folders digitally. This application is quite easy and reliable to use in which it gets a data from the user to return the accurately maintained printable folder.

This application also allows teachers to maintain quizzes, assignments and exams with the question paper, its general solution with best, average and worst examples, class notes, manuals, lectures and course contents. This application also allows teacher to enlist covered sub topics with week number. It allows HOD to check teacher performance about file uploads and course covered and notify them.

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# CHAPTER 1

#### INTRODUCTION

#### 1.1 Introductory Background

The project entitled "BIIT Teacher's Folder Management System" is a crossplatform mobile application released for Android iOS and Web platform which offers teachers to maintain their educational folders digitally. This application is quite easy and reliable to use in which it gets a data from the user to return the accurately maintained printable folder.

"BIIT Teacher's Folder Management System" allows teachers not only to maintain the folder but also to maintain quizzes, assignments and exams with the question paper, its general solution with best, average and worst examples, class notes, manuals, lectures and course contents. This application also allows teacher to enlist covered sub topics with week number. It allows HOD to check teacher performance about file uploads and course covered and notify them.

This application also helps the teachers who are teaching same course to different classes to keep an eye on the common covered topics by each teacher.

This app also allows HODs to maintain the records as a teacher as well as other subordinates as a head of department. It allows to have a check and balance on their folders' accuracy, maintain teachers' record, their classes, student records and their profiles. Beside this, the application named as 'BIIT Teacher's Folder Management System' is also designed for the students as they are allowed to get their weekly plans, course content like lectures, notes and manuals etc.

#### 1.2 Problem Statement

Sometimes it happens to teacher when they want to maintain more than one educational folder, they often mess with the things and get targeted by mismanagement by wrong distribution of contents. Beside this, manual work takes a lot of extra time to be completed. So, to avoid this problem, there is a need of an application to maintain the folders digitally to reduce the resources and workload as well as to save the quality time. Also, the need of this project during online classes and lockdown, teachers couldn't maintain physical folders thus making data access and sharing difficult due to remote locations of faculty members. CLO's were presented by the International CS

Committee that needed to be mapped on subject's topics. Another problem which rose was the course learning objectives put forward by the international computer science committee in order to standardize the education of computer science throughout the world. Per their instructions the course learning objectives had to be mapped with topics that were being taught in the university.

#### 1.3 Scope

The scope of this project covers wide area clearly define the boundaries of the proposed application. System provides following features to the user.

- ➤ Keeping record of weekly course content
- Keeping record of covered topics
- Maintaining Notes and Lab Manuals
- > Student Attendance
- > Student Weekly Quizzes with solutions
- > Student Weekly Assignments with solutions
- > Student Mid and Final Exams with solutions
- > Final Results
- Faculty Course Reviews with Assessment and Analysis

#### 1.4 Objectives

The core objective and aim of the BIIT Teacher's Folder Management System is to achieve following:

- > To make the user-friendly Interface
- > To make the minimum Redundancy
- > To maintain the record of students quizzes assignments and exams along with their solutions
- ➤ To map course learning objectives with the topics being taught to ensure that the students learning is in accordance to the international computer science associations standards.
- ➤ To get a clear image of the topics taught by subject teacher for the paper settings.

#### **CHAPTER 2**

#### PROJECT BACKGROUND

The Higher Education Commission was established in 2002 by the Government of Pakistan to facilitate the development of indigenous universities to become centers of excellence for education, research and development. Through facilitating this process, the HEC intends to play its role in spearheading the building of a knowledge-based economy in Pakistan. Founded by Presidential Ordinance No LIII1 in September 2002, the Commission was entrusted with a broad mandate to evaluate, improve and further develop the higher education and research in Pakistan.

The reform agenda is supported through the grant of adequate powers along with record increases in financial resources by the Government. Since its establishment, the Higher Education Commission has undertaken a systematic process of implementation of the five-year (2005 -2010) agenda for reforms outlined in the HEC Medium Term Development Framework (MTDF), in which Access, Quality and Relevance are identified as the key components. To address these challenges a comprehensive strategy was outlined that identifies the core strategic aims for reform as

- (i) Faculty Development
- (ii) Improving Access,
- (iii) Excellence in Learning and Research,
- (iv) Relevance to National Priorities.

These strategic aims are supported by well-integrated of cross-cutting themes for developing Leadership, Governance and Management, enhancing Quality Assessment and Accreditation, and Physical and Technological Infrastructure Development. Quality has remained at the top of the agenda in HEC Medium Term Development Framework II (2010-15). The goal has been to develop and implement high standards of quality across all university activities and making it compatible with the world. Higher Education Institutions (HEIs) in the country will put efforts to get recognition from the Higher Education Commission by demonstrating that standards set by the HEC are being met and academic activities are also in accordance with the policies of the Commission.

The Higher Education Commission (HEC) will develop and improve policies in order to further enhance the standards according to international practices and development. The Higher Education Commission anticipates that Higher Education Institutions will work towards achieving excellence through continuous improvements in their quality and effectiveness. The Higher Education Commission has taken a significant initiative of performance based Institutional recognition and started up with primary step of outlining the Performance Evaluation Standards for the HEIs to be used for the purpose. A total of eleven standards are defined in this document and each one of these articulates a specific dimension of the institutional quality. Thus, all the eleven standards are equally important to be met by the HEIs to achieve the recognition status as a certification to quality provision in higher education.

#### 2.1 Previous Projects and Research Article

The project entitled "BIIT Teacher's Folder Management System" developed by (Khan, 2019) is a cross-platform mobile application platform which offers teachers to maintain their educational folders digitally.

"BIIT Teacher's Folder Management System" allows a teacher not only to maintain the folder but also to keep the previous semester records and import them in current semester folder. Beside this, the app allows teacher to maintain quizzes, assignments and exams with the question paper, its solution and best, average and worst student solved solution. Not only this, the application also allows teacher to maintain their notes, manuals, lectures and course contents. Beside this the survey and analysis can be done by using FCR and AA forms available in the application. This application also helps the teachers who are teaching same course to different classes to keep an eye on the common covered topics by each teacher.

This app also allows HODs to maintain the records as a teacher as well as other subordinates as a head of department. It allows having a check and balancing on their folders' accuracy, maintaining teachers' record, their classes, student records and their profiles. Beside this, the application named as 'BIIT Teacher's Folder Management System' is also designed for the students as they are allowed to get their weekly plans, course content like lectures, notes and manuals etc.

For the HEIs at a Glance Various performance evaluation standard outlining major areas to be focused on by the HEC for evaluation of their effectiveness and future development are given below:

- (i) Mission Statement and Goals
- (ii) Planning and Evaluation
- (iii) Organization and Governance
- (iv) Integrity
- (v) Faculty
- (vi) Students
- (vii) Institutional Resources
- (viii) Academic Programs and Curricula
- (ix) Public Disclosure & Transparency
- (x) Assessment & Quality Assurance

The totality created by fundamental elements and other relevant information regarding institution under evaluation is significant for institutions and evaluators in order to make correct and informed decisions. Fundamental elements, context statements and evidences of fulfillment of standards should not be used separately as check lists for decision making. For instance, an institution may not possess evidence for a specific fundamental element but demonstrate the fulfillment of that standard through 6 alternative information and analysis. Therefore, totality of the analytical concept is significantly important to follow the best practices of decision making for institutional performance evaluation. Another thing is also important to understand that these standards are minimum requirement for an HEC recognized institution however; HEIs may raise these standards up to desired level to achieve excellence in academia.

The mission is developed through involvement of the institution's community, and approved by its governing body. It defines the institution, its scope, characteristics and individuality as an academic institution. The basic purpose of establishment of the institution should be reflected in the mission statement. Moreover, the mission of an effective institution to be is well translated and articulated through a set of goals to be achieved throughout the whole academic body with substantial participation of management, faculty, students and the community. The mission and goals are developed through a consultative process conducted amongst all stakeholders and the governing body of the institution.

An effective mission and consistent goals have the following essential factors:

 Support scholarly and academic activities at all levels appropriate to basic purposes of the institution.

- Developed through consultation with all concerned who are responsible for implementation or facilitation of the accomplishment of these goals.
- Passed through an ongoing process of periodic evaluations and formal approval.
- Publicized and shared broadly with all concerned.

Analysis reports of the process adopted for development of mission and subsequent goals and periodic reviews of mission and goals. Analysis reports of the process of application of these goals and coordination for implementation. IPE reports of processes adopted to disseminate the mission and goals to faculty, students and members of the governing body and efforts to maintain the institution's commitment to the mission amongst members of the institution.

The institution demonstrates clarity and relevance of mission and conducts periodic reviews for evaluation of the content and relevance of its mission and goals and to assess their effectiveness in guiding planning and resource allocation. The evaluation results are periodically reviewed so that the institution demonstrates that it has responded to reviews to improve and further enhance institutional quality and its relevance to national needs.

An HEC recognized HEI is expected to demonstrate the following attributes as fundamental elements of faculty members and other professionals of the institution are appropriately qualified, trained and prepared to assume the assigned roles and they are adequate in numbers. Curricula is designed, maintained and updated by trained and qualified faculty and professionals working at the institution faculty, other professionals and even teaching assistant staff demonstrate excellence and continuous professional growth in respective fields contributing to accomplishment of the mission of the institution. Adherence to respective criteria and procedures of faculty appointment, promotion, supervision, evaluation, tenure, dismissal etc. Well-articulated and implemented criteria for evaluation of all those professionals and faculty members who are responsible for academic programs. Well-developed mechanism of institutional support for a consistent faculty development and advancement in the context of teaching, research, scholarship and service.



Figure 2.1: Login Screen of Creatix ERP

In figure 2.1 the login screen is shown in which admin need to be login with their username and password. The username and password are provided by university. Once admin login successfully he views dashboard of complete accrediting management system.

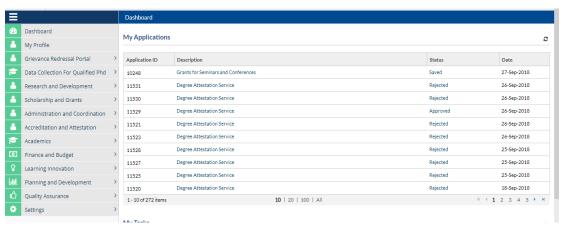


Figure 2.2: Dashboard Screen of Creatix ERP

In figure 2.2 dashboard screen is shown. In which all features of University accrediting management system are shown. In first menu there is Information menu which show information about Student, Teachers, Subjects and Departments, Folders, Accreditation, Grades, Quality assurance etc. On click of student all information related to student will be opened and same for others sub menus. Second menu is about Assign different information to different students such assign semester, assign course, assign rooms. Third module is about library. This software is also capable of management of library. In which books are entered and give to students and return of books. In next module, Result making. The result making is main features of this applications. In which teachers enter each Course CLO and map with mids-term, finals-term, quizzes and assignments. And also, their they describe how PLO will map with each CLO. These results are producing on different outcomes. Every student must achieve that objective to full fill degree requirements. If any Program learning outcomes not completed then he/she not able to get degree. The nest module is about report generation. Report about result card. The report consists of each course marks he gets in that course. This report can be produced by admin. The last module of this software is about transport management. In transport management student information about fees and where to pick him/her.

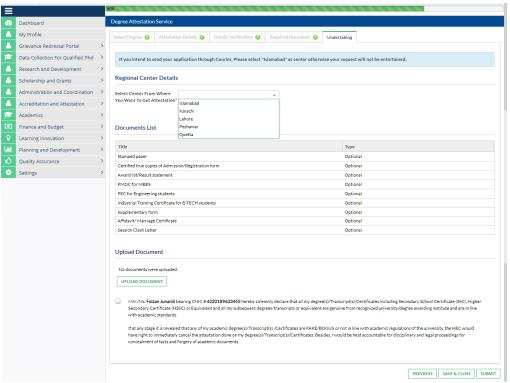


Figure 2.3: Student Degree Accreditation Screen of Creatix ERP

In figure 2.3 this screen describes complete degree accreditation setting of applications. In first frame it allows us to add new authority or roles member. These members have authority to edit, modify and delete contents in application. In next frame basic information about institute is shown in which you can edit it name, phone number also change logo and also change main images. The next frame is based on main feature which is GPA setting. Each institute has their own setting of GPA calculator in which some institute has 5 GPA points. So, here every institute can easily set their own GPA setting. This chapter is consisting of history of same applications developed with their user guide. In this I explain previously used application which is made by envato market. In this same scenario I has built this android application in which result is calculated on CLOs and PLOs.

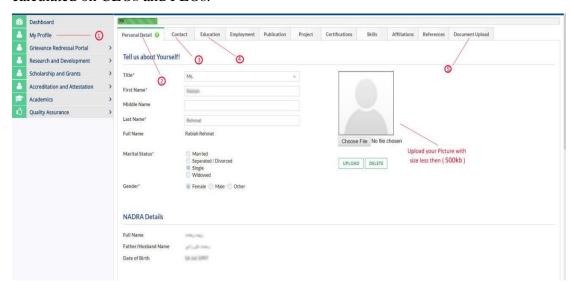


Figure 2.4: Students Detail Screen of Creatix ERP

In figure 2.4 the screen describes about student information. This information is retrieved from database by php backend code. We can easily search student by name. This information includes about student id, name, department name, batch, section status etc. If admin want to see complete list of students then this menu will be clicked and you can see complete student list.

# **2.2 Previous Project Screenshots**



Figure 2.5: Login Screen

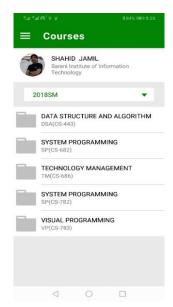


Figure 2.6: Teacher Dashboard

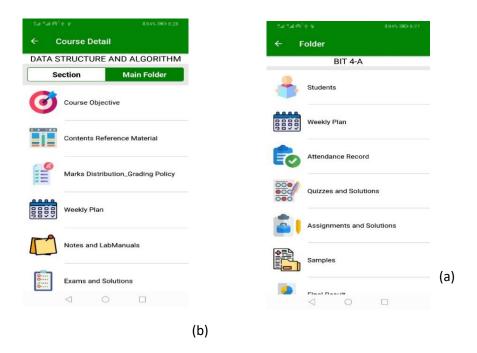


Figure 2.7 (a,b): Section-vise Folders & Content List



Figure 2.8: Weekly plan covered by Teacher

# CHAPTER 3

## **DESIGN**

#### 3.1 Requirement Elicitation

BIIT Teacher's Folder Management System is a cross-platform react native based mobile application where teachers can maintain their educational folders according to the requirements of HEC while students can access their study material.

#### 3.2 Requirement Specifications

In BIIT Teacher's Folder Management System teachers can provide the data required to maintain the folder in the form of pictures or text and place it into proper section. HODs can approve or disapprove the folder based on the content and structure. Students can access their study material based on their courses and semesters.

#### 3.2.1 Functional Requirements

It is critical to identify mobile platform and functional requirements. Functional requirement will specify a behavior or function, for example: Teachers can maintain their educational folders according to the requirements of HEC. HODs can approve or disapprove the folder based on the content and structure. Students can access their study material based on their courses and semesters.

#### 3.2.2 Non-Functional Requirements

Nonfunctional requirements of this project

- GUI
- Reliability
- Availability
- Performance

#### 3.2.3 Domain Requirements

It is the requirement that comes from the application domain of the system that reflects the characteristics of that domain. The domain requirement of this system should concern about the requirements that reflect characteristic application. Like Android devices and iOS devices. And it requires a network connection to fetch data for users

# 3.3 Conceptual Diagram

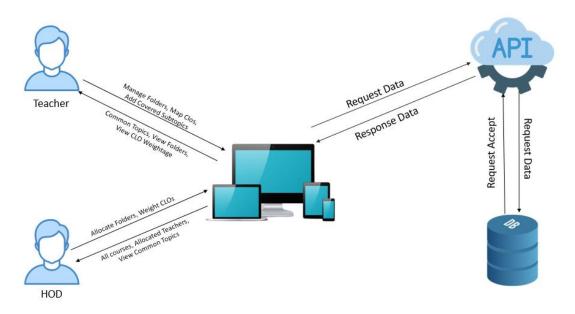


Figure 3.1: Conceptual Diagram

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## 3.4 Data Flow Diagram

Data flow diagram represents the flow of data between system and entities. As described below how alumni can communicate with system and which tasks are allowed to alumni and which tasks are performed by the Admin.

#### **3.4.1 DFD Level 0**



Figure 3.2: Data Flow Diagram – Level 0

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#### **3.4.2 DFD Level 1**

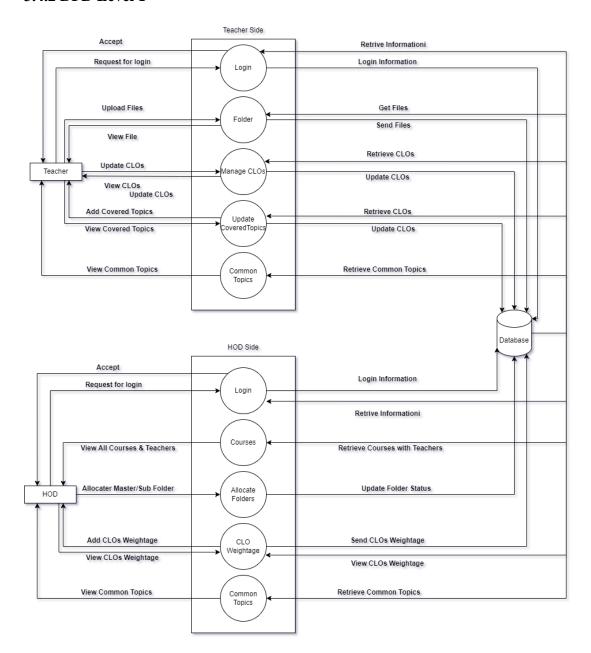


Figure 3.3: Data Flow Diagram – Level 1

Approved by: Sir Shahid Jamil

# 3.5 Entity Relationship Diagram

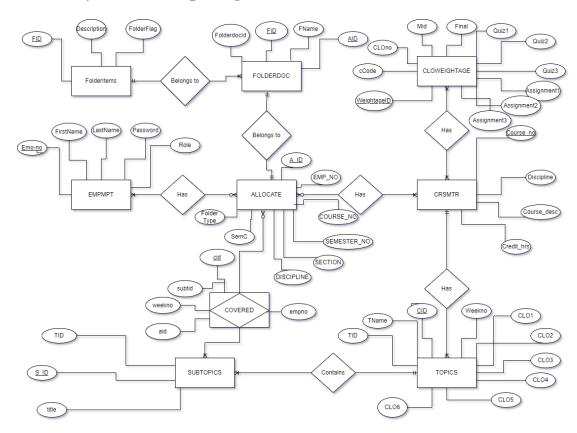


Figure 3.4: Entity Relationship Diagram

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#### **CHAPTER 4**

#### **IMPLEMENTATION**

This chapter includes the discussion about the Tools and Technologies which have been used for designing of this application. It also includes how the application has been designed through coding. Also, this chapter includes the discussion about graphical user interface and this can be shown through project screen shots.

#### 4.1 Tools and Technologies

Following is the list of Tools and Technologies which is used to develop this application. It includes development tool, language, and database information.

#### For Mobile App

- Android Studio
- XCode
- Visual Studio Code
- Java Development Kit
- Python Development Kit
- React-CLI
- Flutter
- React Native
- React Js

#### For Web API

- C# Asp.net Web API
- SSMS 2018
- MSSQL 2017
- Visual Studio 2019
- Microsoft Framework 4.7.

#### 4.2 Pseudo Code

#### **User Sign In**

```
If (username & password = is match to database)
{    Display [Courses]}
Else {        Display ("Username Does not match")}
```

#### **Dashboard**

```
If (user == HOD) {Display HOD Dashboard}
Else If (user == teacher) {Display Teacher Dashboard}
```

#### **Courses Screen**

```
If (user selected Course)
{Display user assigned courses}
Else {Display ("No course assigned to user. Kindly contact admin.")}
```

#### **Folder Screen**

```
If (User select course)
{Display section-vise folders}
```

#### **Course Content Screen**

```
If (user select Course Content)
{Display course content screen}
```

#### File Upload Screen

```
If (User selected file is pdf or word)
{File Uploaded Successfully}
Else {Display ("Invalid selected file")}
```

#### **Common Topics Screen**

```
If (All sections covered same subtopics)

{Display [Respective course teachers common subtopics]}

Else {Display ["No common sub topics"]}
```

#### **CLO's Weightage Screen**

```
If (CLO's weightage is equal to 100)

{CLO's weightage inserted}

Else {Display ["CLO's weightage must be 100"]}
```

#### 4.3 Graphical User Interface

Following are the screenshots of three technologies are given below React Native, Flutter, React Js.

#### **User Sign In**

In this screen user will add his/her credentials to create account on "BIIT Teacher Folder Automation System". User will enter Mobile number and Password to sign-in with his/her account.

#### **Graphical User Interface (React Native)**



Figure 4.1: User Sign In (React Native)

#### **Course Content Screen**

These are the content management screens of BIIT Teachers Folder Automation System, in which content item are showing according to subject. Content items are showing with title, week number, priority, and topics.

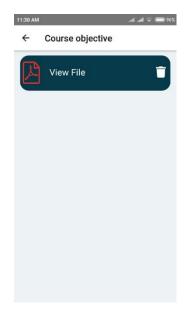


Figure 4.2: Course Content/Objective Screen (React Native)

#### **Weekly Plans:**

In this screen when user click on the option, user can see the covered topics by him or teacher of that subject. After that if user want to add any topic in covered portion, he/she can check it and if want to remove, the checkbox related to that title will be unchecked.

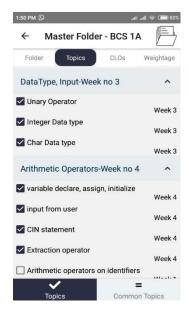


Figure 4.3: Weekly plan covered by Teacher (React Native)

#### **Student Attendance:**

In the screen user can see the attendance of every student of specific subject, he/she is teaching along with percentage and in detail using date filters as well as complete semester attendance.

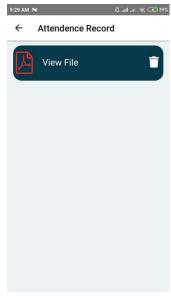


Figure 4.4: Attendance Summery (React Native)

#### **Lecture Notes and Lab Manuals:**

In this screen teacher will add class notes, lab manuals and other documents including books, handouts, referenced study material that will be added in the folder file as well as it will be available to the students on their account to have a look anytime.



Figure 4.5: Notes (React Native)



Figure 4.6: Lab Manuals (React Native)

#### **Quizzes:**

In this module teacher can update daily or weekly quizzes along with the question, remove existing one as well as can update and modify it as per need. This data will append to the folder in the form of pdf as an essential part.

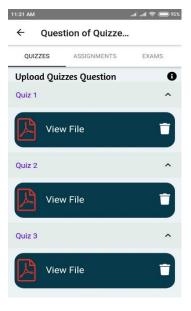


Figure 4.7: Quizzes (React Native)

#### **Assignments:**

In this module teacher can update daily or weekly assignments along with the question, remove existing one as well as can update and modify it as per need. This data will append to the folder in the form of pdf as an essential part.

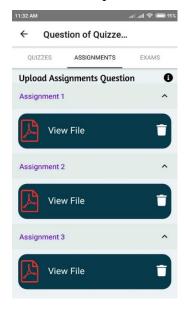


Figure 4.8: Assignments (React Native)

#### **Exams:**

In this module teacher can update mid-term or final-term papers along with the question, remove existing one as well as can update and modify it as per need. This data will append to the folder in the form of pdf as an essential part.

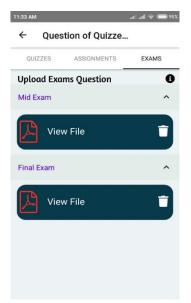


Figure 4.9: Exams (React Native)

# Faculty Course Review and Assessment and Analysis Survey:

In this module teacher can give a survey for the given questions in faculty course review as well as in Assessment and Analysis.

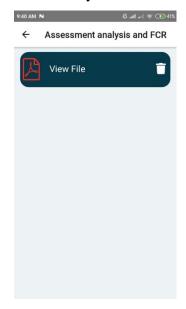


Figure 4.10: FCR (React Native)

#### **Cam Scanner:**

In this Module teacher can take the images from Camera convert it into pdf, and upload in respective folder content.

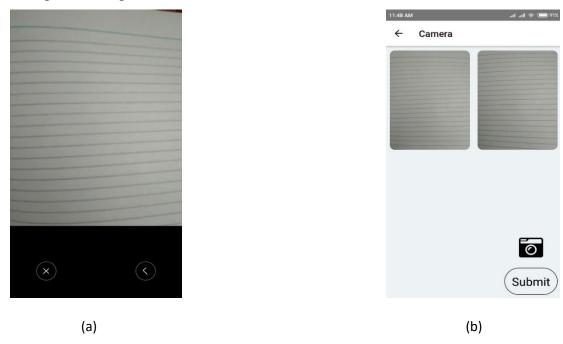


Figure 4.11 (a, b): Cam Scanner (React Native)

# CLO's Weightage:

In this Screen teacher can view the CLO's weightage set by the HOD for each subject.



Figure 4.12: CLO's Weightage (React Native)

# CLO's mapping:

In this screen subject teachers will decide with subject specified CLO's To map against every topic of their subject.

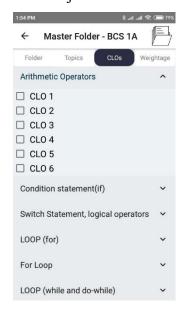


Figure 4.13: CLO's mapping (React Native)

#### **Allocated Courses**

In this screen teacher can view all courses which are assigned in current semester.



Figure 4.14: Allocated Courses (React Native)

# **Update CLO's Weightage:**

In this screen HOD can update the CLO's Weightage, Weightage must be 100%.

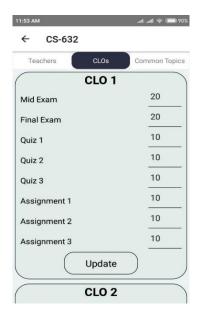


Figure 4.15: Update CLO's Weightage (React Native)

# **Assign Folders**

In this screen HOD can view all teachers which are teaching the same course. Assign the master and sub folder.



Figure 4.16: Assign Folders (React Native)

# **Graphical User Interface (Flutter)**

# **User Sign-in**



Figure 4.17: User Sign In (Flutter)

# **Course Content Screen**

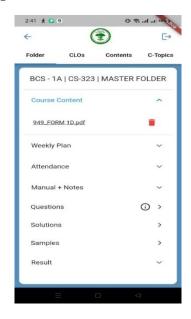


Figure 4.18: Course Content/Objective Screen (Flutter)

# **Weekly Plans**

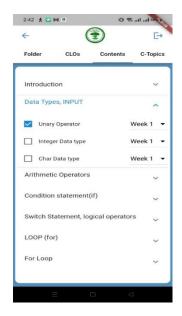


Figure 4.19: Weekly plan covered by Teacher (Flutter)

### **Student Attendance:**

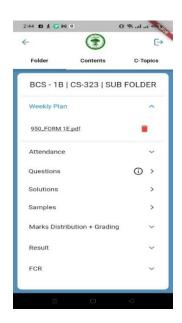


Figure 4.20: Attendance Summery (Flutter)

# **Lecture Notes and Lab Manuals:**

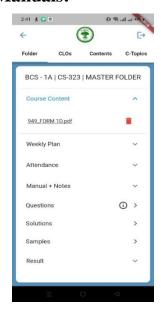


Figure 4.21: Lecture Notes and Lab Manuals (Flutter)

# **Quizzes:**

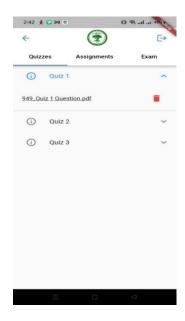


Figure 4.22: Quizzes (Flutter)

# **Assignments:**

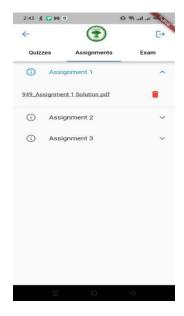


Figure 4.23: Assignments (Flutter)

# Exams:

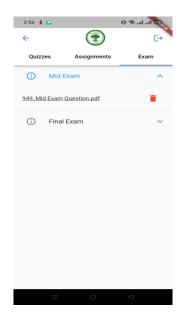


Figure 4.24: Exams (Flutter)

# Faculty Course Review and Assessment and Analysis Survey:

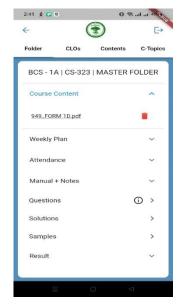


Figure 4.25: FCR (Flutter)

# **Cam Scanner:**

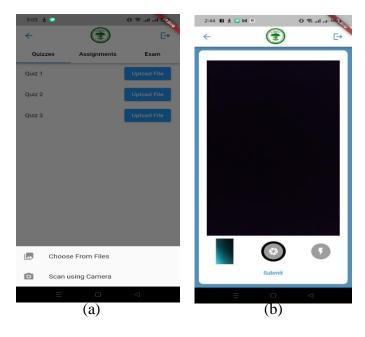


Figure 4.26 (a,b): CamScanner (Flutter)

# CLO's Weightage:

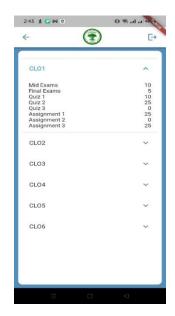


Figure 4.27: CLO's Weightage (Flutter)

# **CLO's Mapping:**



Figure 4.28: CLO's mapping (Flutter)

# **Allocated Courses:**



Figure 4.29: Allocated Courses (Flutter)

# **Update CLO's Weightage:**

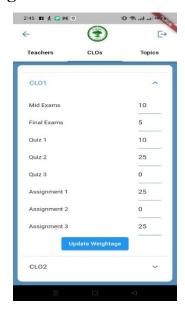


Figure 4.30: Update CLO's Weightage (Flutter)

# **Assign Folders**

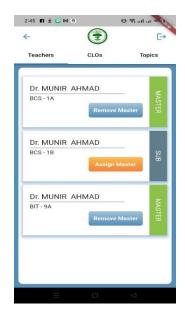


Figure 4.31: Assign Folders (Flutter)

# **Graphical User Interface (React Js)**

# **User Sign In**

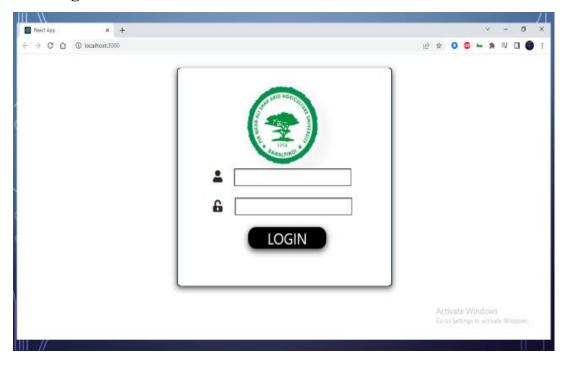


Figure 4.32: User Sign In (React Js)

### **Course Content Screen:**

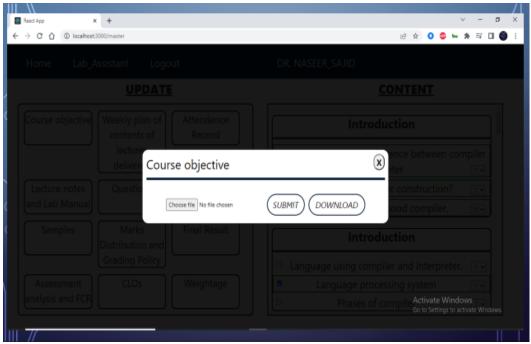


Figure 4.33: Course Content/Objective Screen (React Js)

# **Weekly Plans:**

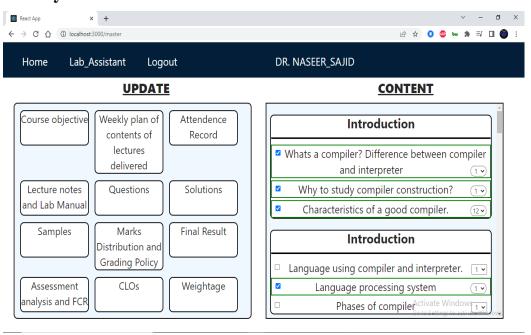


Figure 4.34: Weekly plan covered by Teacher (React Js)

### **Student Attendance:**

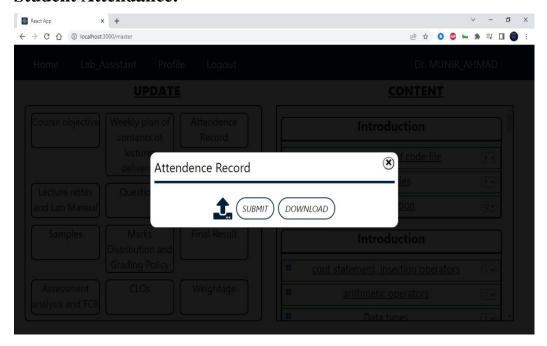


Figure 4.35: Attendance Summery (React Js)

### **Lecture Notes and Lab Manuals:**

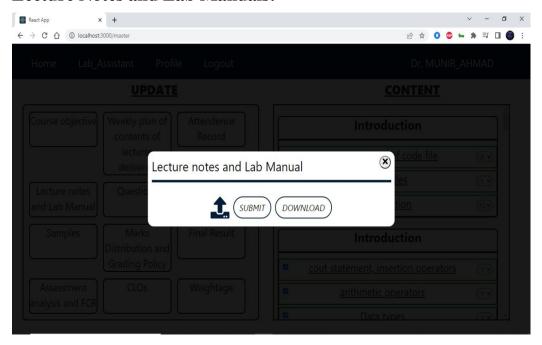


Figure 4.36: Notes and Lab Manuals (React Js)

# **Quizzes:**

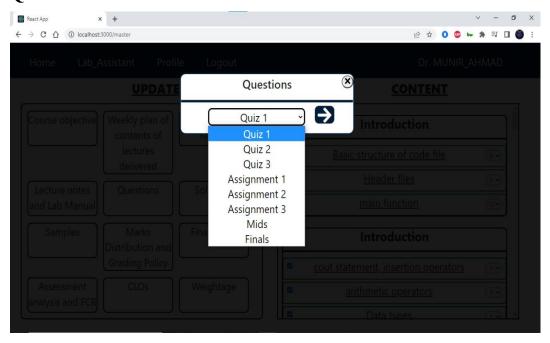


Figure 4.37: Quizzes (React Js)

# **Assignments:**

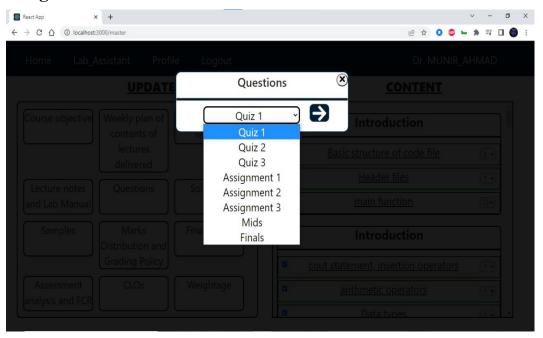


Figure 4.38: Assignments (React Js)

### **Exams:**

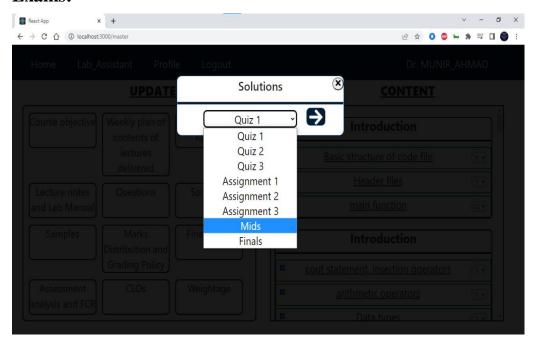


Figure 4.39: Exams (React Js)

# Faculty Course Review and Assessment and Analysis Survey:

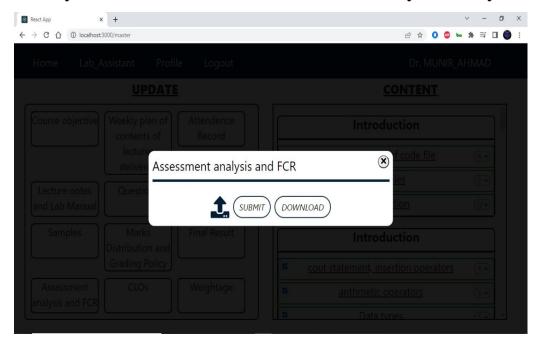


Figure 4.40: FCR (React Js)

### **Cam Scanner:**

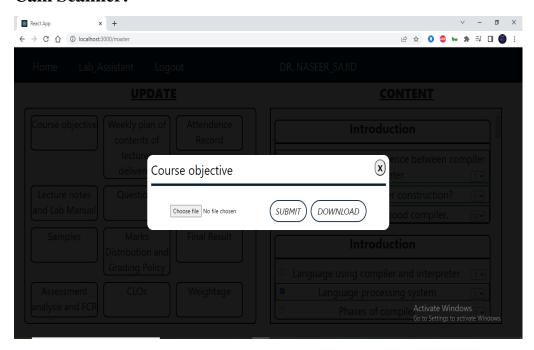


Figure 4.41: Cam Scanner (React Js)

# CLO's Weightage:

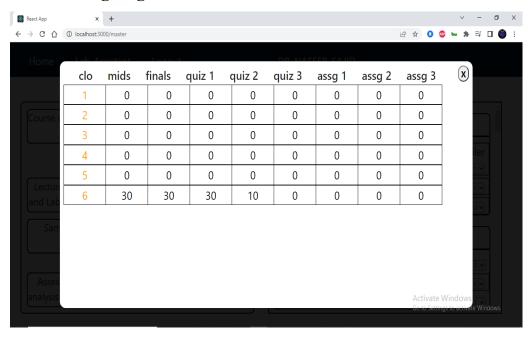


Figure 4.42: CLO's Weightage (React Js)

# **CLO's Mapping:**

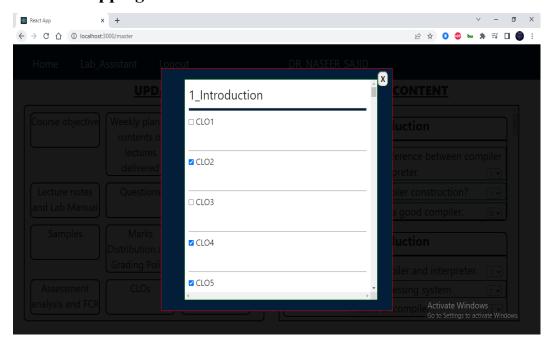


Figure 4.43: CLO's mapping (React Js)

### **Allocated Courses**

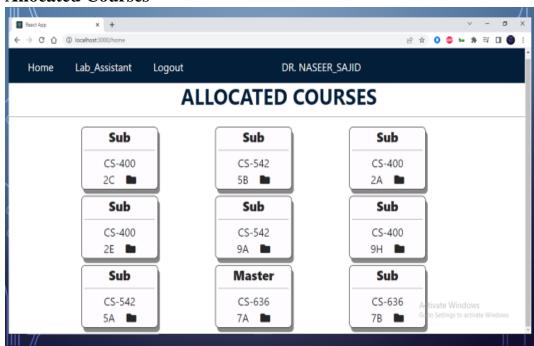


Figure 4.44: Allocated Courses (React Js)

### **Update CLO's Weightage:**

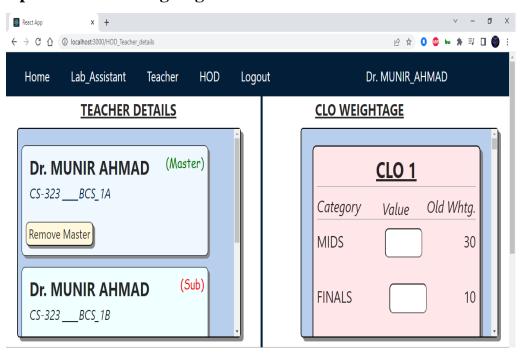


Figure 4.45: Update CLO's Weightage (React Js)

### **Assign Folders:**

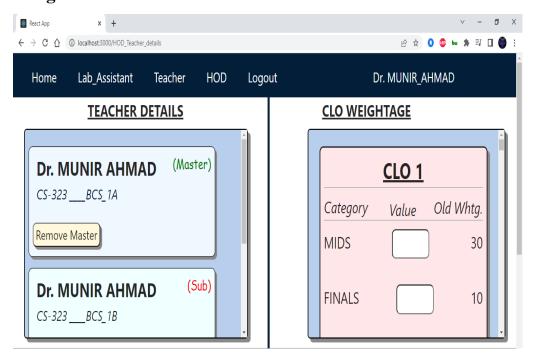


Figure 4.46: Assign Folders (React Js)

# CHAPTER 5 CONCLUSION

#### **5.1 Conclusion Remarks**

This project is successfully completed and met the requirements and objectives. The application covers all the major modules which are used to fulfill the requirements and facilities and also provide effective and efficient platform for user to select best candidate together. "BIIT Teacher Folder Automation System" is a software solution for the teachers of BIIT who wants to save their data, time and efforts. This app provide facility for user to maintain their folders and educational material in accurate and appropriate way.

### **5.2 Future Directions**

In future this app can be modified to give users more relaxation, is can view desired folder completion ratio using percentage on dashboard, as most of teachers in BIIT hesitate to share their folders online. So, if they cooperate and share their data with the app "BIIT Teacher Folder Automation System", this app can work for better for the teachers who will use it in future.

#### 5.3 Limitations

The application is dependent on Android devices, iOS devices as well as windows devices, and the other thing that user must be having an Internet connection. Although it's not that much noticeable for now but with time and evolution in technology so will the app.

### **REFERENCES**

- [1] <u>Eli White, Rachel Nabors</u> (2009) React Native Guide for Beginners, Vol. 4.
- [2] <u>Brent Vatne, Satyajit Sahoo, Michał Osadnik</u> (2017) Basic Structure of React Navigation, Vol 1, pp. 25-28
- [3] Kevin Dockx (2019) Building a RESTful API with ASP.NET Core 3 Vol 1, pp 3-8
- [4] J. Fallows (2007) Networking technology, Atlantic Monthly, pp. 34-36
- [5] Hassan Al-Haj Ibrahim (2014) Quality Assurance and Accreditation in Education
- [6] Alderman, G. (1996). Quality Assessment in England: A worm in the bud? Proc. 8th Intl Conf. On Assesg. Qual. in HE., Gold Coast, Australia, pp 179-95.

### **ANNEXURE**

### **Annexure A: Authentication**

### Login

- Step 1: Enter Teacher Username and Password.
- Step 2: Click on Login Button.
- Step 3: Click Forget password button, if user forget the password.

### **Annexure B: Dashboards**

#### **Teacher Dashboard**

On successful logged in Teacher on his/her dashboard.

#### **Allocated Courses**

Teacher can view all allocate courses.

### **Master Folder**

- Step 1: Teacher can view master folder contents.
- Step 2: Teacher can upload the files.
- Step 3: Teacher can also delete the files.

#### **Sub Folder**

- Step 1: Teacher can view master folder contents.
- Step 2: Teacher can upload the files.
- Step 3: Teacher can also delete the files.

### Weekly plan

- Step 1: Teacher can view the all topics subtopics.
- Step 2: Teacher can check the subtopics with week number.
- Step 3: Teacher can also uncheck of subtopics.

### **CLO's Mapping**

- Step 1: Teacher can view Topics CLO's.
- Step 2: Teacher can also Map the CLO's with topics.
- Step 3: Teacher can also uncheck the CLO's.

### **Common Topics**

Teacher can view the common sub topics of each course.

### **HOD Dashboard**

### **All Courses**

HOD can view all courses which are teaching in current semester.

### **Assign Folders**

- Step 1: HOD can view all teachers in each same course.
- Step 2: HOD can assign the master/sub folder.
- Step 3: HOD can also remove the master/sub Folder.

### Insert/Update CLO's Weightage

- Step 1: HOD can insert CLO's weightage.
- Step 2: HOD can update CLO's Weightage.
- Step 3: HOD can also view CLO's Weightage.