

Internship On Mobile & Web Application Development With Flutter

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY


DHAKA, BANGLADESH

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APPROVAL

This Project titled Internship on Mobile & Web Application Development with Flutter, submitted by Hasan Jahangir Chowdhury to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on January 2023.


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Professor and Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University


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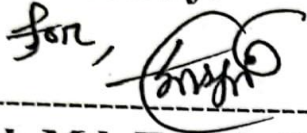
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External Examiner

DECLARATION

As a result, we may declare that I conducted this research while an assistant professor in the CSE department at Daffodil International University, working under **Shah Md. Tanvir Siddiquee's** supervision. We further attest that neither the whole project nor any individual part has ever been submitted to another university for review in order to receive a degree or certificate.

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We begin by giving Allah the highest praise and gratitude for His wonderful blessings, which enabled us to successfully finish the internship.

Shah Md. Tanvir Siddiquee, an **assistant professor** in the department of computer science at Daffodil International University in Dhaka, has our deepest gratitude and admiration. To complete this job, our supervisor must have extensive knowledge and a deep interest in "Software Development." This endeavor was made possible by his never-ending patience, academic leadership, persistent encouragement, constant and vigorous supervision, constructive criticism, insightful counsel, reading numerous subpar versions, and fixing them at all levels.

We would like to express our heartiest gratitude to **Shah Md. Tanvir Siddiquee** and the Head, Department of CSE, for his kind help in finishing our project and also to other faculty members and the staff of the CSE department of Daffodil International University.

We want to express our gratitude to all of our Daffodil International University classmates who participated in this conversation while finishing their education.

Finally, we must respectfully appreciate our parents' unfailing support and endurance.

ABSTRACT

Learning how to create mobile applications and websites using the programming language was the goal of this internship. Usually, we create mobile applications using a variety of programming languages. Some of them are used to create the user interface and the front end of the program, while others are used to build the back end and maintain the software's databases. An example would be the flutter framework, which is used to develop the front end of mobile and online applications. Dart, Python, JavaScript, Java, etc. are used to develop back-end. Currently, a number of frameworks, including Django, React, Kotlin, Odoo, and Flask, are extensively utilized. A framework's structure can be used to create software. Due to the fact that it serves as a basis, you are not beginning from scratch. Frameworks are often connected to a particular programming language and are useful for many different activities. I selected this field because a mobile app is an effective sales tool that enables you to solve your clients' needs, provide them the knowledge they need to make decisions, and generate appealing calls to action. My abilities and intellectual capacity were strengthened when I was employed by the software company EON SYSTEM, which will aid me in advancing my career as a mobile and web developer. While working on projects with senior developers from "EON SYSTEM," I was able to resolve genuine issues. This report will outline the whole process of developing mobile and web applications and highlight the skills I obtained from my internships.

TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	ii
Declaration	iii
Acknowledgements	iv
Abstract	v
CHAPTER	
CHAPTER 1: INTRODUCTION	1-4
1.1 Introduction	1
1.2 Motivation	1
1.3 Internship Objectives	2
1.4 Introduction to the Company	3
1.5 Report Layout	4
CHAPTER 2: Organization	5-8
2.1 Introduction	5
2.2 Product and Market Situation	6
2.3 Target Group	6
2.4 SWOT Analysis	7
2.5 Organizational Structure	8
CHAPTER 3: Tasks, Projects and Activities	9-18
3.1 Daily Task and Activities	9
3.2 Events and Activities	10
3.3 Project Task and Activities	10

3.4 Challenges	18
CHAPTER 4: Competencies and Smart Plan	19-20
4.1 Competencies Earned	19
4.2 Smart Plan	20
4.3 Reflections	21
CHAPTER 5: Conclusion and Future Career	22
5.1 Discussion and Conclusion	22
5.2 Scope for Further Career	22
APPENDIX	23-25
Appendix A: Internship Reflection	23-24
Appendix B: Company Detail	25
REFERENCES	26

LIST OF FIGURES

FIGURES	PAGE NO
Figure 2.5: Organizational structure of EON SYSTEM	8
Figure 3.1.1.1: Log In Page	11
Figure 3.1.1.2: Dashboard Page	12
Figure 3.1.1.3: Attendance Main Page	13
Figure 3.1.1.4: Add Row Facility	14
Figure 3.1.1.5: Delete Row Facility	15
Figure 3.1.1.6: Download CSV	16
Figure 3.1.1.7: Upload CSV	17

CHAPTER 1

Introduction

1.1 Introduction:

We are aware that an internship seems to be a job, professional learning opportunity that relates to a student's field of study or career interest. Additionally, an internship enables a student to explore and advance their academic and professional goals while also picking up additional new skills. An internship enables a business to develop a talent pipeline for potential full-time workers as well as provide fresh perspectives, energy, and passion to the workplace. In addition, I believe I gained more relevant experience for my own CV, such as overseeing a team, an office, or any computer hardware. Organizing and analyzing data, setting up budgets and work orders, and creating several projects. Being able to interact with coordinators, supervisors, and strangers is becoming increasingly important. In light of this, I believe that my experience working with computers has increased since I started studying computer science. However, it is not enough for me, as mobile and web application is a big and difficult area of contemporary technology worldwide. I thus believe that I need to improve my real-world experience and application development skills. My internship report details the process of developing mobile and web apps for the internship that was successfully completed. I'm interested in an internship at EON SYSTEM.

1.2 Motivation

Building smart engineering and technology abilities is the goal of internships. To increase our capacity for employment creation, it is crucial to understand fiction and use it responsibly. This internship was motivated by a desire to learn more about the industry of mobile and web development as well as the working environment of IT companies. There are several employment openings, so even if I don't land a position with a large corporation, I can still make money and take care of my family. Because I enjoy design, I've discovered that creating applications is the ideal career for me. Making an application is a simple skill to pick up, but understanding interactive mobile and web development takes job experience with the organization. I knew I was still studying mobile and web programming when I started my internship at EON SYSTEM, so my

first task was to study interactive development. Design and development education is enjoyable and fascinating. With Dart, Flutter, Python, and Framework, building an app or website is simple and enjoyable if you follow the development process step-by-step.

1.3 Internship Objectives

A professional learning opportunity known as an internship provides students with useful, hands-on work that is relevant to their academic or career objectives. A student can explore and build a profession while learning new skills through an internship. It enables businesses to cultivate talent, add fresh perspectives and vigor to the office, and build a possible pipeline for future full-time workers. A quality internship:

- Consists of a part- or full-time work schedule where no more than 25% of duties are administrative or clerical in nature.
- Gives a detailed explanation of the task or project for work experience.
- introduces the organization, its culture, and the suggested job assignment to the student.
- Assists in achieving learning and student development objectives.
- Give us regular feedback on the work we're doing.

I've taken a few programming language classes over the past four years while attending Daffodil International University to work toward a bachelor's degree in computer science and engineering. But given how competitive the developer market is, it wasn't enough to succeed. So, in order to understand more about the market and my skill development, I joined EON SYSTEM as an intern.

In my internship report, I'll talk about the things I've learnt and done. Additionally, it will discuss how I developed throughout my internship at EON SYSTEM.

- The concept uses Dart, Flutter, Hive, Python, Database and Server.

- Keeping in touch with tech professionals and improving our development expertise with new/current technologies.
- To engage with companies and enhance communication abilities.
- Habitual in a professional setting.
- Acquiring technological knowledge.
- Improving skill development
- Acquiring official information.
- How to search out information
- Job-search strategy

1.4 Introduction to the Company

Application service provider EON SYSTEM is a business. It was founded in 2014. Mr. Sabbir, the founder of EON SYSTEM, has dedicated his life to altering people's lives and professions. EON SYSTEM provides many application kinds with a real-time project-based methodology. The motivation to create new ways and approaches to their services is fueled by real-world competition. With shifting vocations, decades of software quality assurance, business analysis, and database administration, it has also influenced the employment market. Their qualified teachers have a wealth of industrial knowledge and are well-versed in measurement technology. Based in Dhaka, Bangladesh, EON SYSTEM is a system integrator and provider of application services. It has worked with top FMCG companies, MNCs, and NGOs for more than 8 years. Additionally skilled in supporting IoT and AI platforms for interconnected solutions. Mobile operators and content suppliers can use a white-label managed application solution from EON SYSTEM. M-Reporting application platform for field force serves not only commercial firms but also nonprofits that actively improve the standard of living in the community.

1.5 Report Layout

I make an effort to showcase my internship work process in a number of ways to accomplish this. Present the general internship introduction, goal, aim, information about our organization, the reason behind the activities, specifics, and corporate design, as well as my responsibilities, from the start. The project I worked on during my internship was then presented. I will attempt to show how my internship has also taught me how to install and design a range of applications and websites. Finally, I'm mentioning what I'll be working on in the future, what I've learned, why I'm doing it, how I could utilize it in the future, and how much more I know. I can finally finish a legitimate project.

CHAPTER 2

ORGANIZATION

2.1 Introduction

Based in Dhaka, Bangladesh, EON SYSTEM is a system integrator and provider of application services. We have worked with top FMCG companies, MNCs, and NGOs for more than 8 years. Additionally skilled in supporting IoT and AI platforms for interconnected solutions.

Mobile operators and content suppliers can use a white-label managed application solution from EON SYSTEM. M-Reporting application platform for field force serves not only commercial firms but also nonprofits that actively improve the standard of living in the community.

a. Head Office

House: # Ka-54/4 (Unit # 4-1) Matbor Bari Masjid Road

(Opposite road of Burger King, Bashundhara Road)

Jogonnathpur, Vatara, Dhaka-1229

Phone: +88-01321139827

E-mail: info@eappair.com

Web: www.eappair.com

b. Programming Languages

- Dart
- Javascript
- Node JSs
- Python

b. Databases Systems

- MySQL
- Hive
- Oracle
- Mongo DB

d. Server Platforms

- Windows
- Ubuntu
- Linux
- MacOS

e. Framework

- Flutter
- Django
- Spring Boot

2.2 Product and Market Situation

The state of our market and goods is quite great. In order to boost customer loyalty by giving its corporate clients vertical solutions, EON SYSTEM collaborated with mobile operators to build and implement services. White label service with complete management is offered by EON SYSTEM. Scalable and appropriate for carrier-wide deployment, services are meant to be. EON SYSTEM is aware of the need for compliance and legal requirements.

We are able to assist operators in reducing costs and hastening deployment while guaranteeing that the service continues to be dependable and beneficial thanks to our international partners with vast expertise in the rising market.

2.3 Target Group

Every business and organization needs learn computer and technology skills in order to be competitive and successful in a world that is changing quickly. The innovative combination of skill sets that are in great demand on the labor market today led to the creation of EON SYSTEM. EON SYSTEM is making the required preparations to accomplish its goal.

- Provide Services
- Government Project
- Financial project
- Managed IT Services from own Datacenter in Bangladesh & UK

2.4 SWOT Analysis

The opportunities, threats, weaknesses, and strengths are all considered in the SWOT analysis. The SWOT analysis is done in response to identifying the key internal and external variables that are all factors are viewed as being vital in achieving a goal.

2.3.1 STRENGTHS

- A passion for knowledge and work
- Creative problem solver
- Ability to plan for everything
- Business sense
- Dedicated

2.3.2 WEAKNESS

- Cannot Articulate without substance
- Poor command in verbal Communication
- Try to avoid Upgrade Application

2.3.3 OPPORTUNITIES

EON SYSTEM is the leading IT-based company that uses their services. Its primary business segments are services, software development, outsourcing, and partnerships. It's also an important customer for data soft. I thus regularly get the opportunity to work on new projects that will broaden my knowledge.

2.3.4 THREATS

When building an application or website, there are several issues that might arise, including access control issues, debugging, code injection, and the exposing of sensitive data. I shall make every effort to prevail.

2.5 Organizational Structure

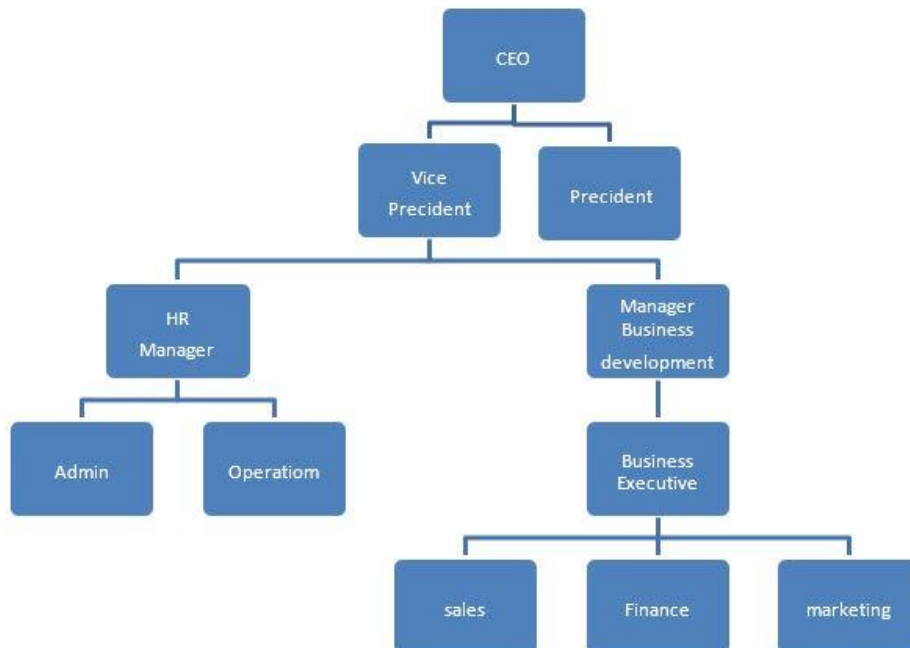


Figure 2.5 Organizational structure of EON SYSTEM

CHAPTER 3

Tasks, Projects and Activities

3.1 Daily Task and Activities

- Understanding the fundamental terminology used in mobile and web technology
- Understanding the software and tools for mobile and web development
- Practicing the Dart Programming Language's Fundamentals
- Dart programming language practice
- Problem solving with Dart
- Advance Problem Solving With Dart Language
- Basic Learning of Flutter Framework
- Understanding The Flutter Architecture
- How Flutter and Dart code gets compiled in native apps
- Understanding Flutter Version
- Setup Flutter in Windows
- Flutter and Material Design
- Introduction to Maps
- Mapping Lists To Widgets
- Understanding Different Types Of Widgets
- Understanding About Andriod Studio
- Understanding About Emulator
- Run The First Application in the Emulator
- Writing Good Code
- Understanding Context
- Understanding Bloc State Management
- Understanding HTTP Request and hit APIs
- Adding Animations
- Publish Application to the App Store

3.2 Events and Activities

I've received training in developing mobile and web applications. I've also worked on a project using my internship experience, which has helped me work with my supervisor, course instructor, and project manager. Build my Attendance Management App project, thanks. Now demonstrate all of the aforementioned working criteria. Show some more prerequisites for understanding web and mobile development:

It will take a lot of time and focus to learn mobile app development.

Simply have to use more judgment while providing assistance to others. because creating mobile apps is a really sensitive topic.

Choosing a programming language is crucial if you want to learn how to create mobile applications. We will go into detail about the types of programming languages to learn for mobile development in this section of the post.

3.3 Project Task and Activities

The online Zu-Shop app's project concept and execution. Using Dart, Flutter, Shared Preference, Hive, Rest Api, and Bloc, I'm beginning to design and construct specific application layouts.

3.3.1 Project Description

- Login Page
- Dashboard Page
- Attendance Main Page
- Add Row Facility
- Delete Row Facility
- Dowload CSV
- Upload CSV
- Find Live Location
- Field Force
- Report

Login Page:

Only authorized person can login

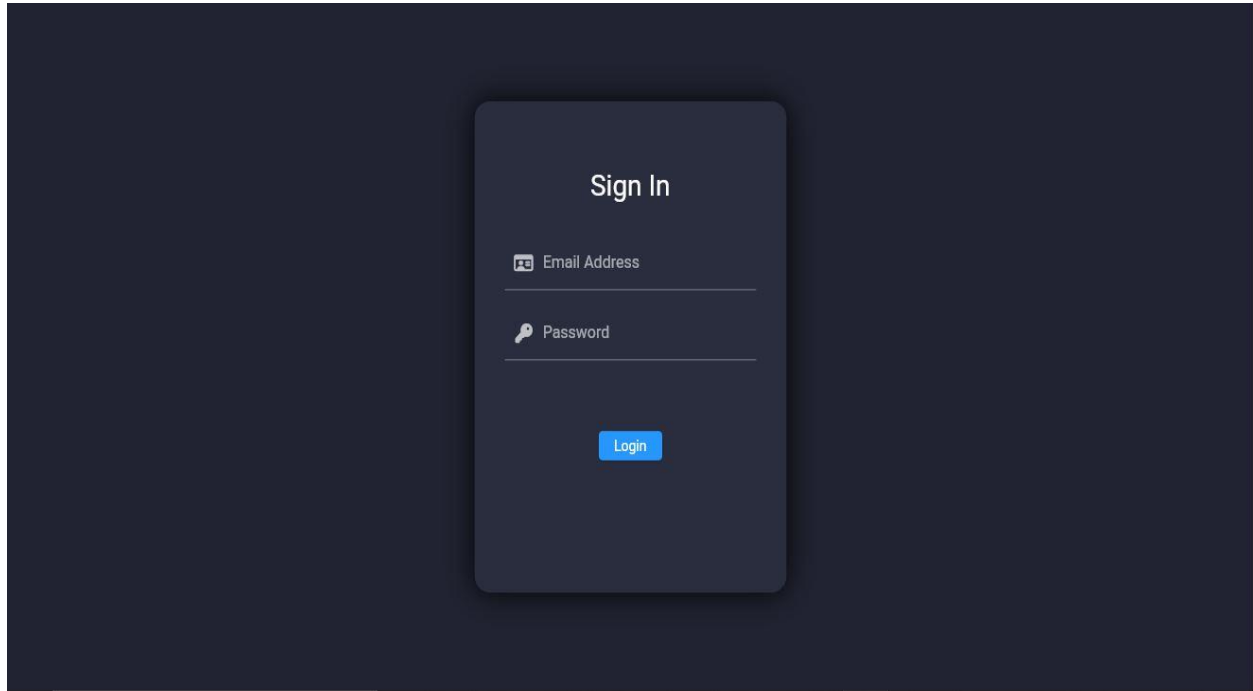


Figure 3.1.1.1 Log In Page

Dashboard:

Access all the functionalities from this page

The screenshot displays the MARICO Dashboard interface. On the left is a sidebar with navigation links: POI Table, Field Force, Attendance table, POI User, Report, and a Logout button. The main content area is titled 'Dashboard' and features a 'POI Table' section with an '+ Add Row' button. Above the table are controls for 'Search Field', 'POI Upload', 'Download', and 'Download Format'. Below these are pagination controls showing 'Page: 1' and a 'Go To' button. The table itself has columns for POI ID, POI Type, Name, Mobile, Market, Territory, Area, and Region. It contains 10 rows of data, all with 'Town' as the POI Type and 'MBL - Reg' as the Region.

POI ID	POI Type	Name	Mobile	Market	Territory	Area	Region
marico-A0001	Town	Barguna	A0001	Null	MBL Barguna	ASM_BARISAL	MBL - Reg
marico-A0003	Town	Barisal	A0003	Null	MBL Barisal	ASM_BARISAL	MBL - Reg
marico-A0005	Town	Borhanuddin	A0005	Null	MBL Bhola	ASM_BARISAL	MBL - Reg
marico-A0007	Town	Jhalokathi	A0007	Null	MBL Barishal Outer	ASM_BARISAL	MBL - Reg
marico-A0009	Town	Perojpur	A0009	Null	MBL Gopalgong	ASM_KHULNA	MBL - Reg
marico-A0012	Town	Torky	A0012	Null	MBL Madaripur	ASM_BARISAL	MBL - Reg
marico-A0013	Town	Patuakhali	A0013	Null	MBL Patuakhali	ASM_BARISAL	MBL - Reg
marico-A0014	Town	Lalmohan	A0014	Null	MBL Bhola	ASM_BARISAL	MBL - Reg

Figure 3.1.1.2 Dashboard Page

Attendance Main Page :

All the attendance details show here

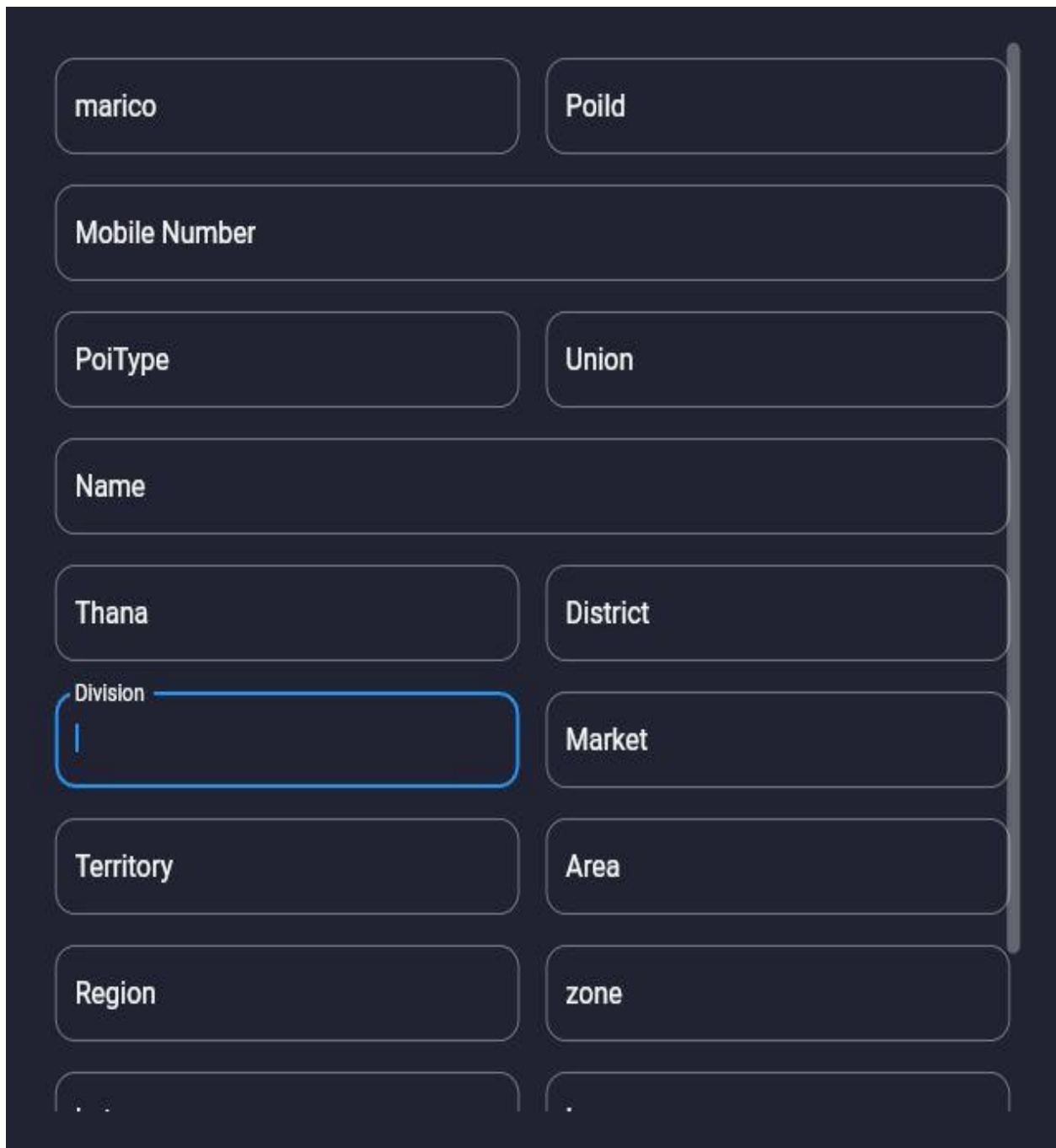
The screenshot displays a web application interface for attendance management. On the left is a dark sidebar with a user profile (MARICO) and navigation links: POI Table, Field Force, Attendance table (active), POI User, Report, and a Logout button. The main content area is titled 'Dashboard' and 'Attendance table'. It includes a search field, a 'Download' button, and date filters set to 'From : 2022-12-03' and 'To : 2022-12-03'. A pagination bar shows 'Page : 1' and a 'Go To' button. Below this is a table with 8 columns: Employee Name, Employee ID, POI Id, Submit Date, Submit Time, Mobile Number, and Lat & L.

Employee Name	Employee ID	POI Id	Submit Date	Submit Time	Mobile Number	Lat & L
Sukho Ranjan Saha	marico-D0038DM05	marico-D0056	03-12-2022	12:53 AM	N/A	Loca
Md. Gias Uddin	marico-E0025DM03	marico-E0025	03-12-2022	6:28 AM	N/A	Loca
Md. Mosaraf Parvej	marico-E0018DM10	marico-A0034	03-12-2022	7:19 AM	N/A	Loca
MD DULAL KHAN	marico-A0013DM01	marico-A0013	03-12-2022	7:25 AM	N/A	Loca
Md Shakib Ahmed	marico-E0010DM15	marico-B0017	03-12-2022	7:28 AM	N/A	Loca
Md. Mostofa Kamal	marico-B0017DM02	marico-B0017	03-12-2022	7:28 AM	N/A	Loca
Mohammad Naiem	marico-B0017DM03	marico-B0017	03-12-2022	7:31 AM	N/A	Loca
Md.Abul Kalam	marico-D0098DM02	marico-B0017	03-12-2022	7:32 AM	N/A	Loca

Figure 3.1.1.3 Attendance Page

Add Row Facility :

User can add row manually

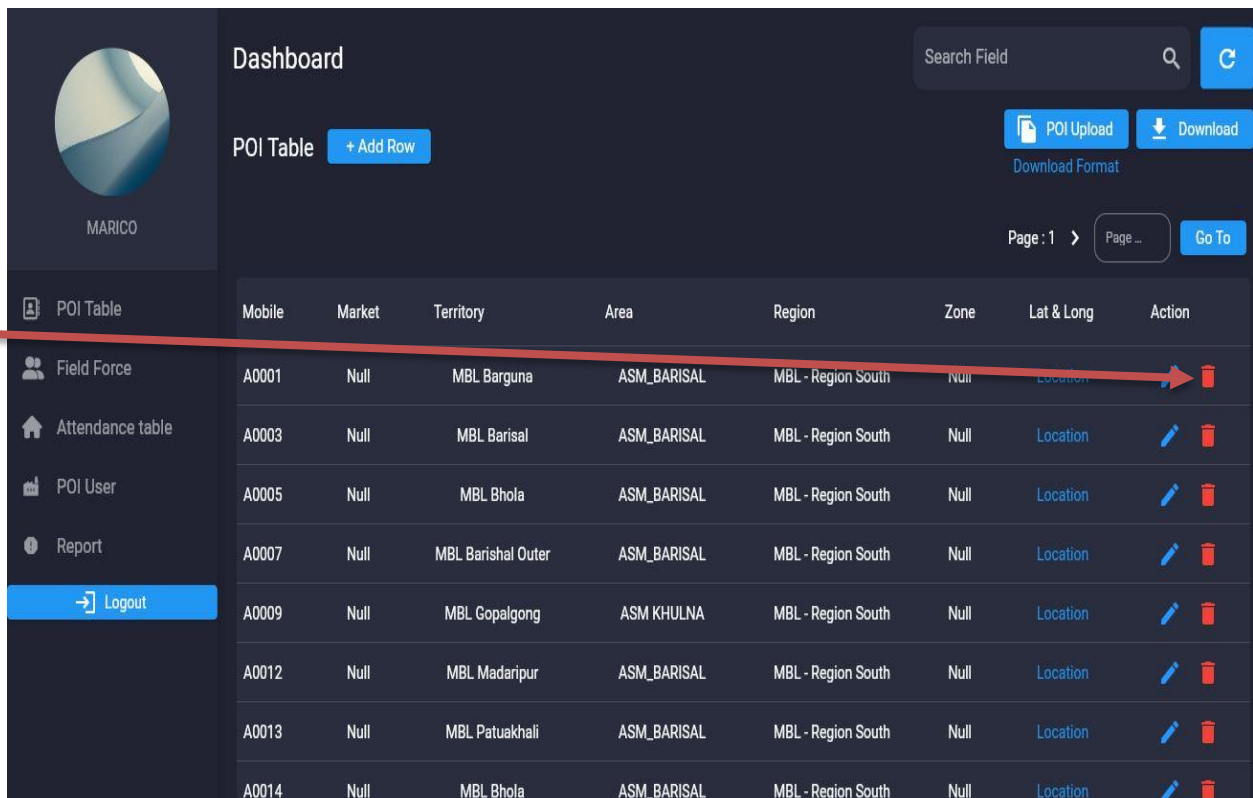


marico	Poild
Mobile Number	
PoiType	Union
Name	
Thana	District
Division	Market
Territory	Area
Region	zone
.	.

Figure 3.1.1.4 Add Row Facility

Delete Row Facility :

User can Delete any row



The screenshot shows a dashboard with a sidebar on the left containing navigation links: POI Table, Field Force, Attendance table, POI User, Report, and Logout. The main content area is titled 'Dashboard' and 'POI Table'. It includes a search field, a refresh button, and buttons for 'POI Upload', 'Download', and 'Download Format'. Below these is a pagination control showing 'Page : 1' and a 'Go To' button. The table has columns: Mobile, Market, Territory, Area, Region, Zone, Lat & Long, and Action. A red arrow points to the delete icon (trash can) in the first row of the table.

















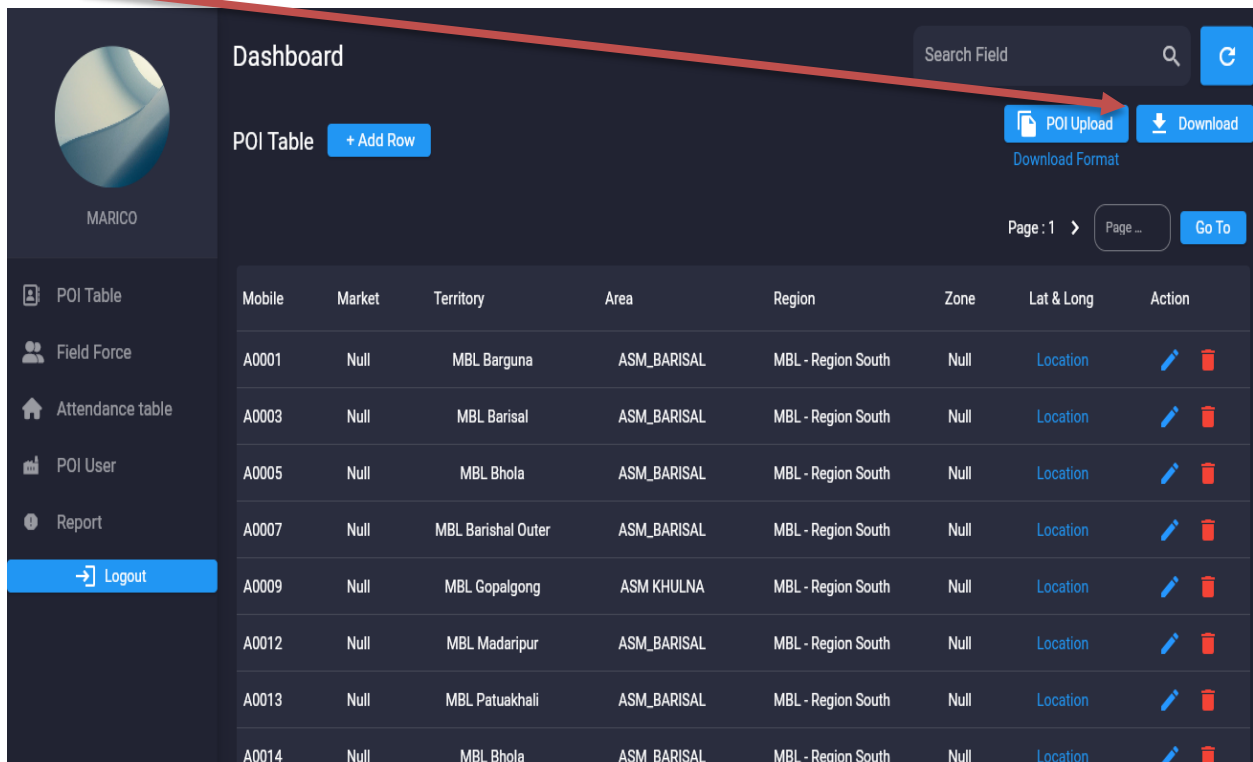
Mobile	Market	Territory	Area	Region	Zone	Lat & Long	Action
A0001	Null	MBL Barguna	ASM_BARISAL	MBL - Region South	Null	Location	 
A0003	Null	MBL Barisal	ASM_BARISAL	MBL - Region South	Null	Location	 
A0005	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 
A0007	Null	MBL Barishal Outer	ASM_BARISAL	MBL - Region South	Null	Location	 
A0009	Null	MBL Gopalgong	ASM_KHULNA	MBL - Region South	Null	Location	 
A0012	Null	MBL Madaripur	ASM_BARISAL	MBL - Region South	Null	Location	 
A0013	Null	MBL Patuakhali	ASM_BARISAL	MBL - Region South	Null	Location	 
A0014	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 

Figure 3.1.1.5 Delete Row Facility

Download CSV :

All attendance can be download by user in CSV file



The screenshot shows a dashboard with a sidebar on the left containing navigation links: POI Table, Field Force, Attendance table, POI User, Report, and Logout. The main content area is titled 'Dashboard' and features a 'POI Table' section with an '+ Add Row' button. A search field and a 'Download' button are located in the top right corner. A red arrow points from the 'Download' button to the 'Download CSV' option in the dropdown menu. Below the table, there is a pagination control showing 'Page : 1' and a 'Go To' button.

















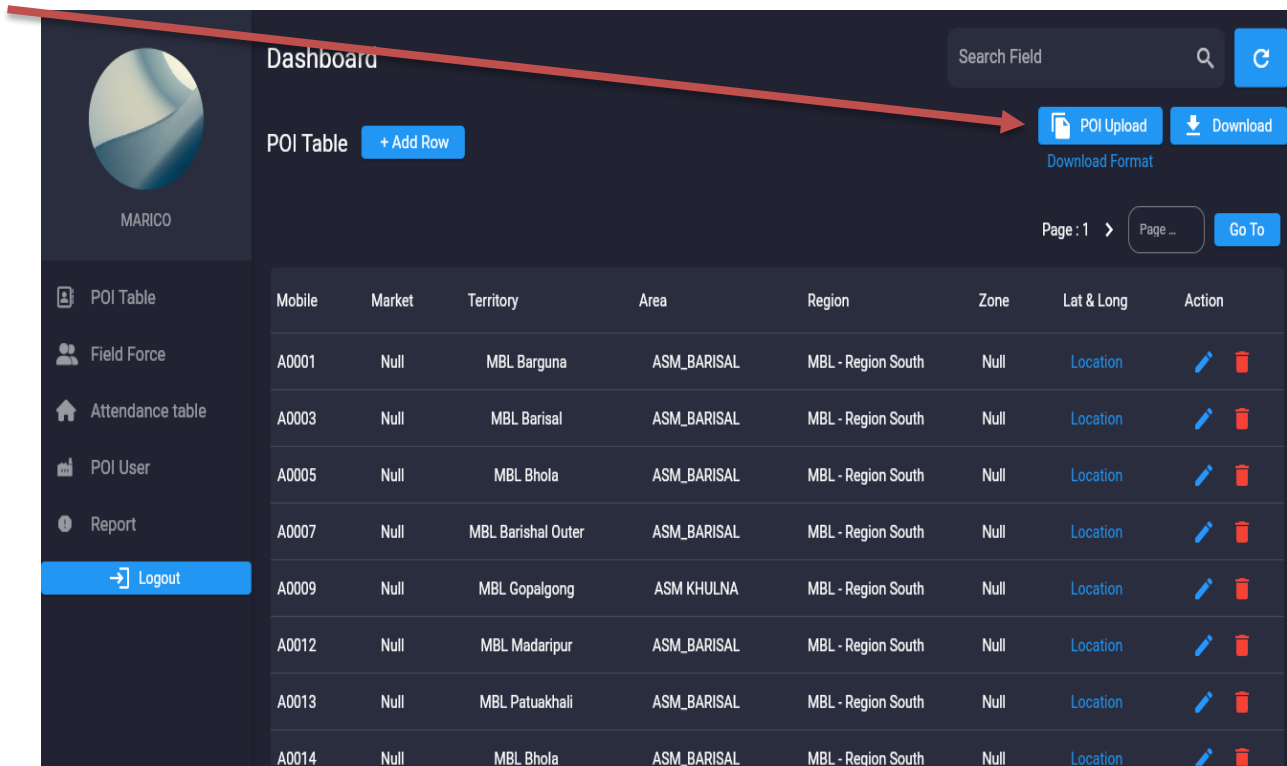
Mobile	Market	Territory	Area	Region	Zone	Lat & Long	Action
A0001	Null	MBL Barguna	ASM_BARISAL	MBL - Region South	Null	Location	 
A0003	Null	MBL Barisal	ASM_BARISAL	MBL - Region South	Null	Location	 
A0005	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 
A0007	Null	MBL Barishal Outer	ASM_BARISAL	MBL - Region South	Null	Location	 
A0009	Null	MBL Gopalgong	ASM_KHULNA	MBL - Region South	Null	Location	 
A0012	Null	MBL Madaripur	ASM_BARISAL	MBL - Region South	Null	Location	 
A0013	Null	MBL Patuakhali	ASM_BARISAL	MBL - Region South	Null	Location	 
A0014	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 

Figure 3.1.1.6 Download CSV

Upload CSV :

All attendance can be upload by user in CSV file



The screenshot shows a dashboard interface with a sidebar on the left containing navigation links: POI Table, Field Force, Attendance table, POI User, Report, and a Logout button. The main content area is titled 'Dashboard' and 'POI Table'. It includes a search field, a '+ Add Row' button, and buttons for 'POI Upload' and 'Download'. Below these buttons is a table with columns: Mobile, Market, Territory, Area, Region, Zone, Lat & Long, and Action. The table contains 10 rows of data. A red arrow points from the 'POI Upload' button to the 'POI Table' title.

















Mobile	Market	Territory	Area	Region	Zone	Lat & Long	Action
A0001	Null	MBL Barguna	ASM_BARISAL	MBL - Region South	Null	Location	 
A0003	Null	MBL Barisal	ASM_BARISAL	MBL - Region South	Null	Location	 
A0005	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 
A0007	Null	MBL Barishal Outer	ASM_BARISAL	MBL - Region South	Null	Location	 
A0009	Null	MBL Gopalgong	ASM_KHULNA	MBL - Region South	Null	Location	 
A0012	Null	MBL Madaripur	ASM_BARISAL	MBL - Region South	Null	Location	 
A0013	Null	MBL Patuakhali	ASM_BARISAL	MBL - Region South	Null	Location	 
A0014	Null	MBL Bhola	ASM_BARISAL	MBL - Region South	Null	Location	 

Figure 3.1.1.7 Upload CSV

3.4 Challenges

3 months, in my opinion, is insufficient time for the greatest and most proficient Flutter Development. To create something unique and original is never easy. Application developers must deal with a lot of complexity and difficulty, and I do too. I believe that creating an app is a difficult process. For a rookie developer, designing and developing mobile and web applications involves a lot of originality, imagination, and brainstorming sessions. Only a mobile app developer can comprehend and describe the difficulties they face on a daily basis. Continuous development and basic critical thinking are often the keys to producing mobile and web development that the target market and users appreciate and recognize. The ability of an app to sync with other applications and to be responsive are essentially the only things that the developers take into account. As a result, developing is a demanding and difficult duty. Working with new individuals is thrilling as a learning opportunity and difficult. The management of security and gathering target users presented the biggest hurdle.

CHAPTER 4

Competencies and Smart Plan

4.1 Competencies Earned

4.1.1 Programming language skills

Programming expertise is essential for creating mobile apps, particularly for languages like Dart, JavaScript, C++, and C#. Programming language expertise can increase a developer's chances of landing a job or a project since it demonstrates that they are capable of using the languages to produce functional mobile applications.

4.1.2 Computer proficiency

Mobile app developers use computer software to develop their applications. This requires significant computer proficiency and direct experience with software development tools. Many mobile app developers also create computer software or other programs, which helps me diversify my skill set and increase computer proficiency.

4.1.3 Back-end computing

- Framework
- Database management
- Hardware interaction
- Security

4.1.4 UI Design

You may create user-friendly application interfaces for users by using effective user interface design techniques. Focusing on the UI's functionality and design may also assist with the software's interoperability with other programs and solve user interface issues. A strong UI design might contribute to the usability and success of the mobile application, which could improve your abilities for future projects.

4.1.5 Cross Platform Skills

Given the proliferation of platforms, it is crucial for mobile developers to be able to create applications for a variety of hardware and operating systems. You may increase your competitiveness in the market by developing a variety of skill sets and understanding cross-platform ideas like code reuse, service support, and basic testing. To increase your knowledge, do some research and take into account the available extra talents.

4.2 Smart Plan

The chance and training required for a career are precisely what internships offer. This internship program will undoubtedly assist me in examining my career options in the IT sector.

Industry Type IT-Software/Software

Services Duration 3 Month(s)

1. Android,IOS and Web app development
2. Server side coding (Back-end)
3. Client side coding (Front-end)
4. Google API integration

4.3 Reflections

The effort of developing mobile and web applications was by no means simple. I want to complete an internship in web and mobile development, and occasionally I want to create in my area of expertise, but I don't have the time to fully grasp all of the features. A very difficult issue arises when attempting to hit an API or establish an API from a database. Many times, designs must be completed with the assistance of coworkers because they are often intricate. It was quite challenging for me to relearn everything because I started working in a new industry and knew very little about it. After resolving challenging problems, there was a lot of happiness. I enjoy developing mobile apps because even though there might be significant obstacles that are challenging to overcome, once they are overcome, a sense of tranquility comes over me. Experience gained from working on several projects leads to many significant problems; overcoming these challenges is the mark of the excellent engineer.

CHAPTER 5

Conclusion and Future Career

5.1 Discussion and Conclusion

I'm really eager to complete an internship in online and mobile app development. I've learned a lot to work on in the present very popular field of mobile and web development. It was a desire of mine to learn things through working for an organization. Understanding how a team works together to finish a job was crucial to me. My internship in the field of mobile app development was crucial since I want to work there full-time. This internship provided me a fresh objective and really aided my professional development. Since every employee in our company has encouraging coworkers that support me in my job, I am really delighted to be employed here. I want to use the lessons I've learnt from my coworkers in my everyday life. Overall, I learned a ton from this experience.

5.2 Scope for Further Career

Given that flutter was released by Google in 2017, the future for flutter app development is promising. It has established itself in the development community in only a few short years. Flutter is preferred by many large organizations over alternative platforms. The flutter user interface is simple, easy to use, and may contribute to the creation of environments that are welcoming to users.

A lot of large businesses, like Netguru, Trident Analytical Solutions, and Pythondevs, already provide development services. Flutter offers quick development, an expressive and flexible user interface, with support for both iOS and Android. Many firms use flutter as their top option due of these qualities.

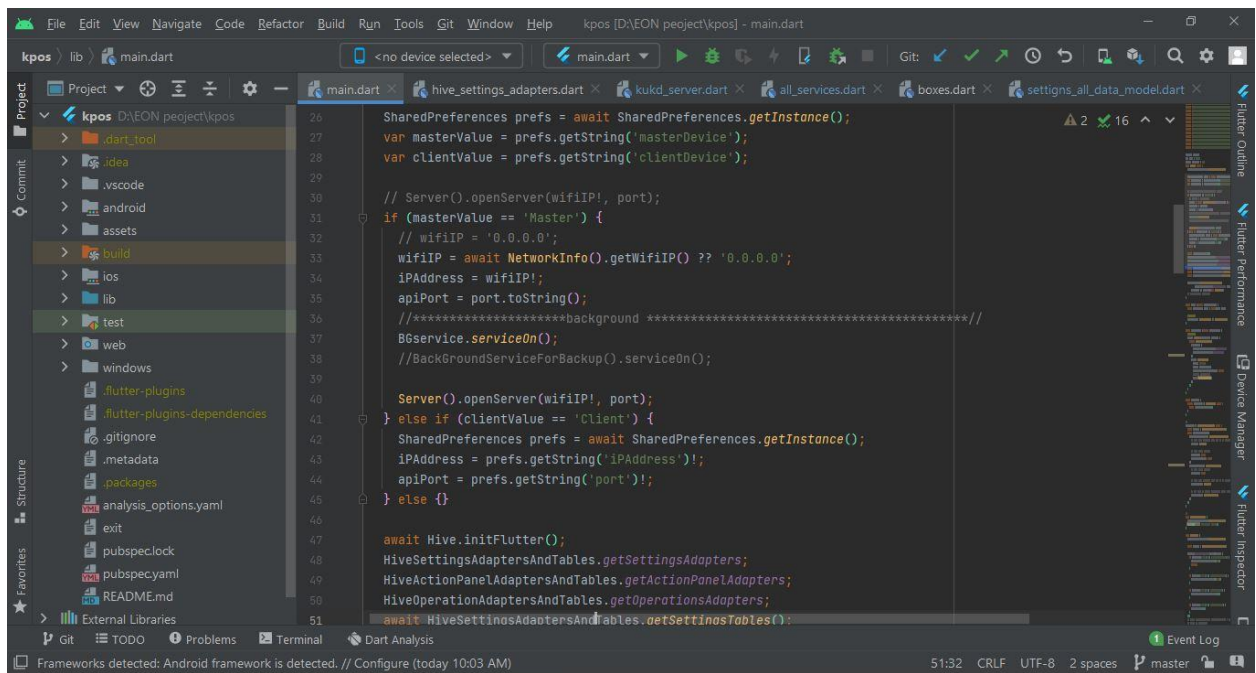
Appendices

APPENDIX A

INTERNSHIP REFLECTION

PROJECT EDIT MODULE:

1.



2

```

26  SharedPreferences prefs = await SharedPreferences.getInstance();
27  var masterValue = prefs.getString('masterDevice');
28  var clientValue = prefs.getString('clientDevice');
29
30  // Server().openServer(wifiIP!, port);
31  if (masterValue == 'Master') {
32    // wifiIP = '0.0.0.0';
33    wifiIP = await NetworkInfo().getWifiIP() ?? '0.0.0.0';
34    ipAddress = wifiIP!;
35    apiPort = port.toString();
36    //*****background *****//
37    BGService.serviceOn();
38    //BackGroundServiceForBackup().serviceOn();
39
40    Server().openServer(wifiIP!, port);
41  } else if (clientValue == 'Client') {
42    SharedPreferences prefs = await SharedPreferences.getInstance();
43    ipAddress = prefs.getString('ipAddress')!;
44    apiPort = prefs.getString('port')!;
45  } else {}
46
47  await Hive.initFlutter();
48  HiveSettingsAdaptersAndTables.getSettingsAdapters();
49  HiveActionPanelAdaptersAndTables.getActionPanelAdapters();
50  HiveOperationAdaptersAndTables.getOperationsAdapters();
51  await HiveSettingsAdaptersAndTables.getSettingsTables();

```

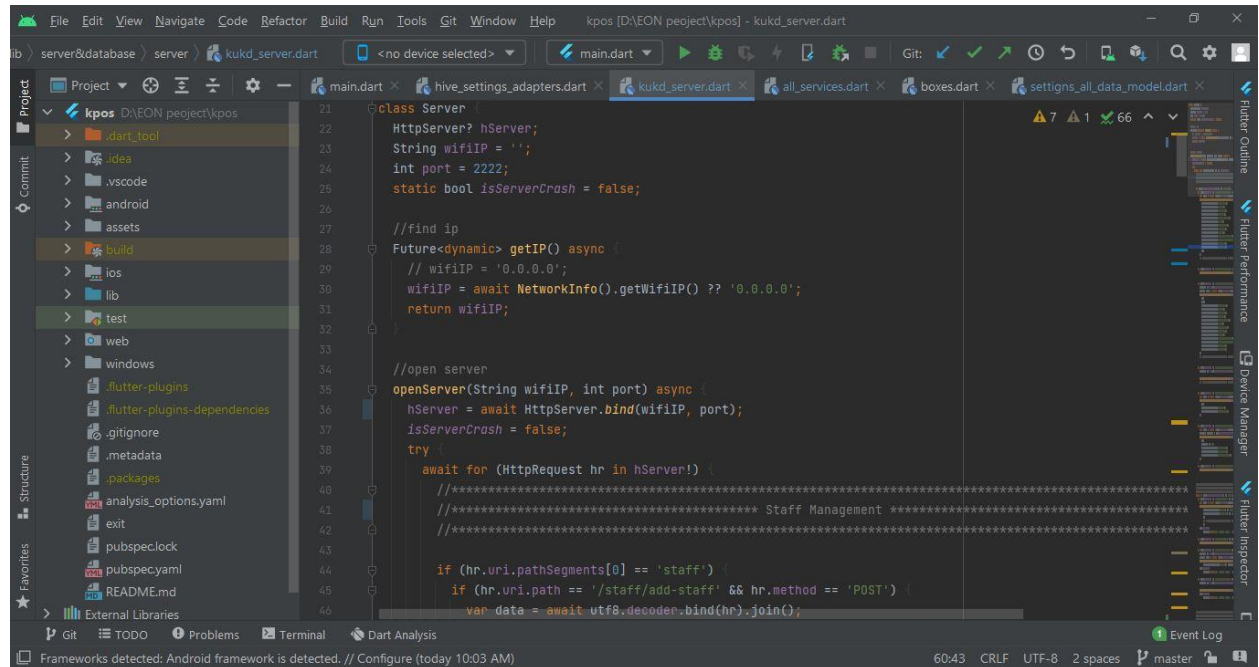
3.

```

21  class Server {
22    HttpServer? hServer;
23    String wifiIP = '';
24    int port = 2222;
25    static bool isServerCrash = false;
26
27    //find ip
28    Future<dynamic> getIP() async {
29      // wifiIP = '0.0.0.0';
30      wifiIP = await NetworkInfo().getWifiIP() ?? '0.0.0.0';
31      return wifiIP;
32    }
33
34    //open server
35    openServer(String wifiIP, int port) async {
36      hServer = await HttpServer.bind(wifiIP, port);
37      isServerCrash = false;
38      try
39      {
40        await for (HttpRequest hr in hServer!) {
41          //***** Staff Management *****
42          //*****
43          if (hr.uri.pathSegments[0] == 'staff') {
44            if (hr.uri.path == '/staff/add-staff' && hr.method == 'POST') {
45              var data = await utf8.decoder.decode(hr).join();

```

4.



This page is screen all project files, where I am using Android studio code tools that easily and successfully implement my website onAttendance Management System.

APPENDIX B

Company Detail

- 2 branches
- 8+ years of experience
- 100+ job placement
- 100+ graduates
- Provide Services Over 10+ Companies

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