

FINAL YEAR INTERNSHIP REPORT ON ANDROID DEVELOPMENT

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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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APPROVAL

This Internship titled “**Android Development**”, submitted by “**Israt Jahan**”, ID No: 153-15-6451 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 November 2, 2019.

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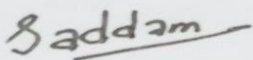
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We hereby declare that this internship has been done by us under the supervision of **Israt Jahan, Android Development, and Department of CSE** at Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

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I also want to thank CloudWell Limited. They have recruited me as an intern and given me the opportunity to work with them. They have given me a proper opportunity to learn and taught me a lot of things.

I also want to take this opportunity to express my profound gratitude and deep regard to my Team Members Mr. Kazi Md. Saidul for his exemplary guidance, monitoring and constant encouragement throughout the course of this internship. He has helped me and taught me how to develop my career as a software engineer and also taught me how to improve my coding style.

I also want to thank Mr. Faiz Shirazi Doller, CTO CloudWell Limited. He gives me a proper opportunity to learn and teach me a lot of things. He has also guided me and given me an opportunity to work with them.

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I would like to express my heartiest gratitude to the Almighty Allah and Head, Department of CSE, for his kind help to finish my internship and also to other faculty members and the staff of the CSE department of Daffodil International University.

ABSTRACT

In this internship report, I am trying to highlights what I have done and what I have learned from doing an internship. In internship as an android developer, my main focus or objective was to learn android, software development lifecycle, improve my coding style, and know about new technology.

Now a day, there are lots of software engineers working on new technology and made lot of android apps. Android apps can make our daily life become easier. In future software engineers as a career will have some good opportunities. For becoming a good software developer, I would need to learn about real life project. I need to learn how an actual project will manage. I am very much interested to start my carrier as an android developer. That is why I choose the internship as an "**Android Development**".

Working in **CloudWell Limited** added huge experiences in my future or upcoming careers. Working with the actual problems of the client, was another key point to gain experiences. This report takes us through all the details of an actual project and experience gathered during this internship at 6 months' time.

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CHAPTER 1

INTRODUCTION

1.1 Introduction of Internship

An Internship is the procedure of on-the-job training, which especially useful for students with major in practical courses.

DIU always highlight on industrial training in academic study. For this motive industrial persons are invited to DIU to talk about their organization and encounters, often some technical courses are completely guided by them. The four-month internship program is another, possibly most successful, way of accomplish industrial training.

Internship helps the students to connect their educational encounters with industrial implementation. I have tried my best to merge the two at once. I was sent for an internship at CloudWell Limited. It is one of the major Finetech organization in Bangladesh.

1.2 Objective of Internship

This report has been composed as a requirement for the internship program of the degree BSc. The report is planned to review my accomplishment, project participation and professional maturation throughout the intern duration.

1.3 Scope of Internship

This report allows a perception of the event that I faced in my organization at CloudWell Limited. Moreover, it allows a short explanation of CloudWell Limited for students who want to get their internship from CloudWell Limited for their professional maturation.

1.4 Motivation of Internship

To work at CloudWell Limited, I have learned about how to build an actual project, how to control the system's structure. I have also grasped some knowledge of coding style. They inspired me to build my profession in software engineer and to know more regarding new technology. I had a really good time to work with them. As I worked there, I get to know a lot of new ideas about software development, lots of exercise of coding style.

1.5 Report Layout of Internship

In this report, I gave a description of the primary idea of some projects that I have come to know and worked continuously this 4-month time. In "chapter 1" I tried to describe introduction of internship, the objective of internship, scope of internship and motivation of internship.

In "chapter 2" I tried to describe the company where I have completed my internship.

In "chapter 3" I tried to describe my project participation in the time of the internship. I have written about the work I have done there and given examples of that work.

CHAPTER 2

COMPANY'S PROFILE

2.1 About CloudWell Limited

CloudWell is an Application Service provider, working for different verticals with remarkable attentiveness in the payments sector. Its Centre of attention is to conduct effectiveness in payment systems so that the price of savings gets lowered for business houses while using all accessible channels for collection of funds. [1]

The company is established in 2012, its influence group members are renowned professionals in banking, FMCG and ICT e-commerce businesses of Bangladesh for over 12 years.

CloudWell is service focused and built around that formula where existing infrastructure is best utilized to enable enterprises with services and solutions. It is currently aggregating a large portfolio of banks and business houses in a single umbrella and is provisioning platforms to merchants on a PaaS (Platform as a Service) model. CloudWell made a software called PayWell. PayWell acts as a one-stop solution for various payments through a large network of outlets, providing users the most convenient way to pay. The retail outlets are available throughout the country and operate long hours to make it easier for users to pay and organizations to sell. Everyone can visit nearby PayWell outlet to recharge their mobile phone, pay utility bills and fees, and buy tickets and online products. [1]

2.2 CloudWell Limited Services

In the present world, to keep business operations connected, every organization depends profoundly on technologies, increase income and bear ever-increasing customer demands. CloudWell Company have made a software called PayWell. PayWell acts as a one-stop solution for different payments through a large network of outlets, supply users the most suitable way to pay. For their customer and retailer, PayWell has some services. [2]

- ❖ **Paying Mobile Bills:** Customers can go to any PayWell outlet and recharge their mobile phone for any operator. PayWell is chosen as national distributor by all mobile network operators in Bangladesh for a different channel. We are approved by Bangladesh Telecom Regulatory Commission (BTRC) to sell domestic and international recharge.
- ❖ **Electricity Bill:** Moreover, customers don't need to worry about the electricity bill payment. They can go to any PayWell outlet whenever they want and pay DESCO, DPDC, West Zone & Pallibidyut bill.
- ❖ **Water Bill:** Customers can go to any PayWell outlet in Dhaka city and can pay their monthly WASA bill through PayWell agents.
- ❖ **Visa Fee:** Customers need to the pay visa application processing fee before they submit an application to any Indian Visa Application Center (IVAC) in Bangladesh. PayWell makes it easier for the customers as they can now pay this fee going to any PayWell agent point.
- ❖ **Mobile Financial Services:** PayWell supplies mobile financial services as a national distributor. All MYCash services including Cash-in, Cash-out and customer registration are available in PayWell outlets which are registered as MYCash agent.
- ❖ **E-commerce:** If customers want to buy online goods offline they can go to any PayWell outlet and buy their necessary goods from a basket of millions of online goods.

- ❖ **Internet & DTH bill:** Customers can pay their Wi-Max Internet bill and DTH TV subscription fee through PayWell outlets.
- ❖ **E-ticket:** PayWell has air and bus ticketing system. If customers want to buy any air and bus ticket he can simply buy the ticket from PayWell.

2.3 Software Development

CloudWell Limited is a fin-tech organization. They have a powerful retailer network. They make financial service system software for their retailer and consumer. They help their retailer and consumer to build software that can useable from the web, mobile, and POS. Retailer and consumer can use their software for business and personal uses.

2.4 Office Schedule

- ❖ CloudWell Limited's office starts at 09:00 am and ends at 6:00 am, from Sunday to Thursday.

CHAPTER 3

OVERALL CONTRIBUTION

3.1 Book Reader App

The Book Reader app is a module of PayWell's Consumer App. In this module, the consumer will be able to read their phone's PDF, Doc and EBook Files. Also, in this module have some Bangla and English books given as samples that can be read by the consumer. It is still under development. Soon this module will be released on their App. [4]

3.1.1 Overview

This is my first work. I've worked with other projects in this project. Under the guidance of Saidul Bhai I have developed this module. By working on this module I have learned a lot about Java and Android. They have not given me any timeline to finish this module. I had to work on a regular basis on this module. In this module, the consumer will be able to read their phone's PDF, Doc and EBook Files. Also, in this module have some Bangla and English books given as samples that can be read by the consumer. [5]

3.1.2 Team

I was assigned to Md. Kazi Saidul Islam for the project and Faij Siraji Sir has given me the requirements for this project. Saidul Bhai has helped me to understand the requirements, how the app will work, module's design and development in such a short time. I could not have completed the given task successfully without his support.

3.1.3 Technologies

When I was told that I need to work on this project, I asked Saidul Bhai which technologies I need to learn to work on this task. He has given me a list of technologies and I learned them.

- ❖ Java
- ❖ Android
- ❖ XML
- ❖ JSON
- ❖ Web Services

I didn't have much idea about these. That's why it was a little tough for me to finished the task.

3.1.4 Tools

- ❖ Android Device
- ❖ JSON Viewer
- ❖ Android Studio
- ❖ Web Services

3.1.5 Book Reader Development Process Details

All PayWell's consumers can use this module by using PayWell Consumer App. It has some menu like Home, New Books, My Library, and Book Store. Fig 3.1.5.1 shows the visualization of the menu.

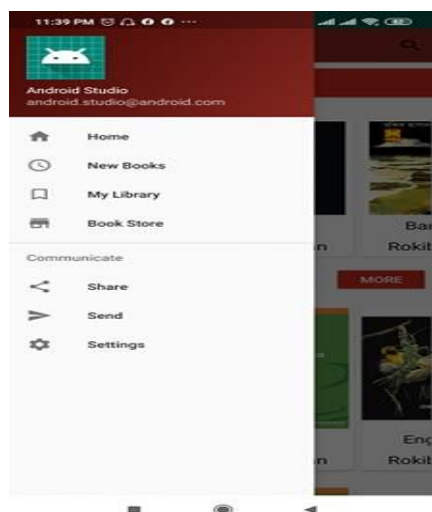


Fig 3.1.5.1: Menu

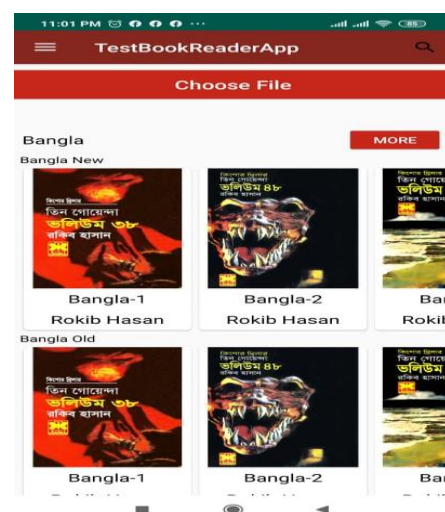


Fig 3.1.5.2: Home Screen

From Home have a file choosing option from where the consumer can choose a file to read from their phone's storage. Fig 3.1.5.2 shows the visualization of the home page. When consumers click chooses file options, it shows all the PDF files from the phone's storage. Fig 3.1.5.3 shows an example of how the file will be shown on the device. By clicking the read-option consumers can open and read sample books.



Fig 3.1.5.3: PDF from Phone's Storage



Fig 3.1.5.4: Sample Book

When reading the given books consumer can change the pages by clicking the page option. Change the brightness by clicking the brightness option, can change the display from day mode to night mode and night mode to day mode, and can change chapters by clicking the chapter's option. The chapter's option has not yet been completed.



Fig 3.1.5.5: Features of Sample Book

3.2 PayWell Launching Screen

PayWell has launched a screen on its App before. But they wanted to modify their app launching screen. So they have assigned me to do the task. They will add this feature to their next app release.

3.2.1 Overview

The launch screen is a static screen that appears when the app is launched on a device and stays on while the app is being loaded. The launch screen is replaced by the first view of the app once the app has been loaded. After the screen has launched verified users can sign in the app and new users can sign up. I have created the launching screen and also created sign-in verification and error methods.

3.2.2 Team

I was directly assigned to this task. Md. Saidul Islam and Md. Bulbul Ahmed has helped me a lot. Bulbul Bhai has given the sample design to me. His given design has helped me to understand the requirements to complete the task.

3.2.3 Technologies

- ❖ Java
- ❖ Android
- ❖ XML
- ❖ Zeplin
- ❖ Git

3.2.4 Tools

- ❖ Android Phone/Emulator
- ❖ Android Studio
- ❖ Zeplin

❖ Git

3.2.5 PayWell Launching Screen Development Process Details

They wanted to keep the sign in and sign up option on launching screen. Where old users can access the app and new users can sign up also. Fig 3.2.5.1 shows the visualization of the launching screen. To sign in, users have to complete some steps. Fig 3.2.5.2 and Fig 3.2.5.3 shows the visualization of the verification checking method. Fig 3.2.5.4 shows the visualization of verified users. Fig 3.2.5.5 shows the error message for the non-verified users.

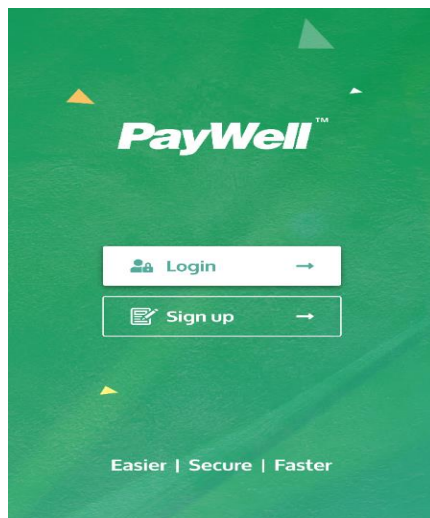


Fig 3.2.5.1: PayWell Launching Screen

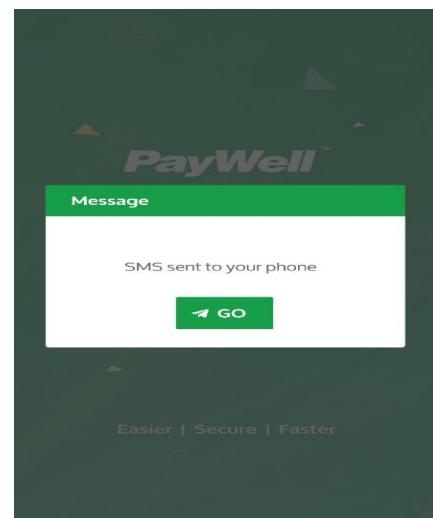


Fig 3.2.5.2: User Authentication

Check-1

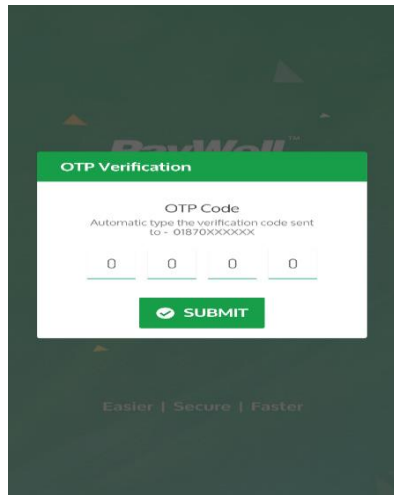


Fig 3.2.5.3: User Authentication

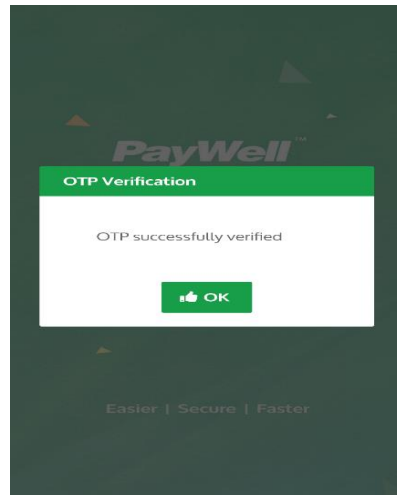


Fig 3.2.5.4: User Authentication Verified

Check-2

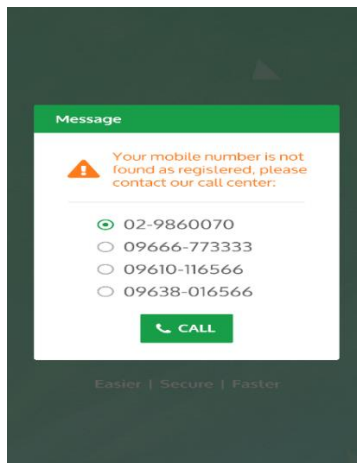


Fig 3.2.5.5: User Authentication Error

3.3 Nagad Service Development

The postal department has started a new service called Nagad. By using this user can cash in and cash out their e-money. Users can cash in and cash out their Nagad account's e-money from PayWell's Platform.

3.3.1 Overview

PayWell App's new service Nagad started shortly after I joined the office. I was assigned to some other members to complete the task. Nagad was PayWell's retailer App. It has some options like Refill Process, QR Code, Balance Claim, and Refill Log. Fig 3.2.1.1 shows the visualization of Nagad's services.



Fig 3.2.1.1: Nagad

3.3.2 Team

I was directly assigned to this task. Md. Saidul Islam has helped me a lot. He helped me to learn about this service and understand the requirements to complete the task. For API Md. Mustafizur Rahman and Tasnim Islam Hema have helped me.

3.3.3 Technologies

- ❖ Java
- ❖ Android
- ❖ XML
- ❖ Web Services
- ❖ Zeplin
- ❖ Git

3.3.4 Tools

- ❖ Android Phone/Emulator
- ❖ Android Studio
- ❖ Web Services
- ❖ Postman
- ❖ Zeplin
- ❖ Git

3.3.5 Nagad Refill Process

The process is given in figure 3.2.5.1 and 3.2.5.2. 3.2.5.1 Shows the balance refill process for Nagad. And 3.2.5.2 is the USSD Refill Process of Nagad.

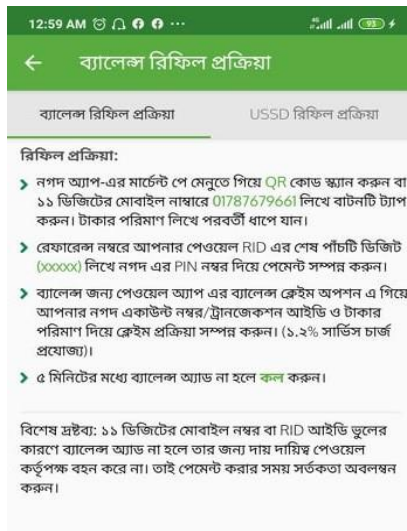


Fig 3.3.5.1: Balance Refill Process



Fig 3.3.5.2: USSD Refill Process

3.3.6 Nagad QR Code

PayWell's retailer app Nagad has a QR Code option. Where the user can scan the QR Code to get the mobile number. Fig 3.2.6.1 shows the visualization of the QR Code.



Fig 3.3.6.1: QR Code

3.3.7 Nagad Balance Claim

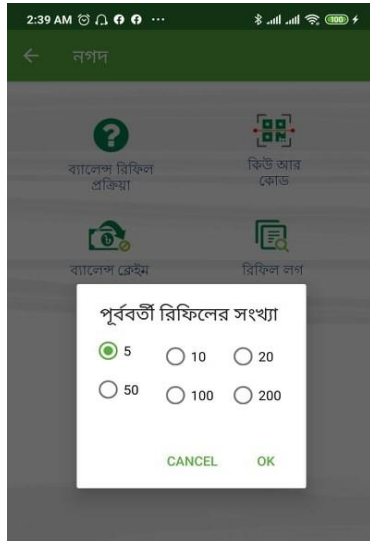
PayWell's retailer app Nagad has a Balance Claim option. Where through transaction id number user can claim balance. Fig 3.2.7.1 shows the visualization of it.



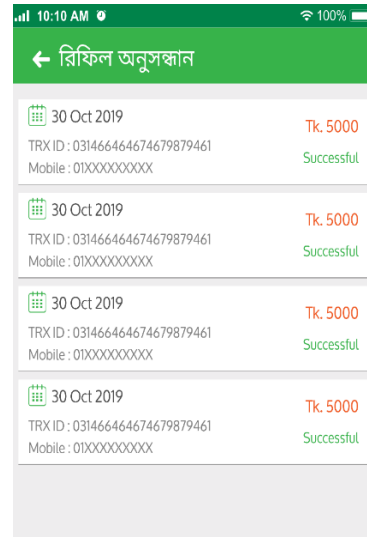
Fig 3.3.7.1: Balance Claim

3.3.8 Nagad Transaction Log

PayWell's retailer app Nagad has a Transaction Log option. Where user can select limit and see their transaction log. Fig 3.2.8.1 and Fig 3.2.8.2 shows the visualization of it.



3.3.8.1: Nagad Transaction Log Limit



3.3.8.2: Nagad Transaction Log

3.4 Deposit Slip Update for Balance Refill

CloudWell Limited wanted to make their employer's job easier and also wanted to store the data so that they can use it later. So, CloudWell Limited wanted to develop Deposit Slip Update module for the benefit of their employers.

3.4.1 Overview

CloudWell Limited wanted to develop a module for their app where their employer would use this module to update their deposit slips. In this module, users can take picture of the deposit slip through their phone's camera or phone's storage and crop it as their wish and they can send it to the API where this picture will be saved. Though the API for this module is yet to be developed.

3.4.2 Team

I was directly assigned to this task. Fajj Siraji Sir has given me the requirements for this task. Saidul Bhai has helped me a lot. He helped me to understand the requirements and

suggested to me what I need to learn to complete the task. This module has still not added to the app. It is still under development and the API is yet to be developed.

3.4.3 Technologies

- ❖ Java
- ❖ Android
- ❖ XML
- ❖ Git

3.4.4 Tools

- ❖ Android Phone/Emulator
- ❖ Android Studio
- ❖ Git

3.4.5 Deposit Slip Update for Balance Refill Development Process Details

This module has three features. Where the user can take a picture from their phone or phone's storage, add effect as their wish and submit it to the API. Fig 3.4.5.1 shows the visualization of the home screen of the module. To submit the picture an API was needed which yet to be developed. Fig 3.4.5.2 shows the visualization of the options to take the picture. Fig 3.4.5.3 shows the visualization of the options to crop, rotate and flip the taken picture. Fig 3.4.5.4 shows the visualization of the taken picture's state after cropping. User can add effect on their picture through this module. Fig 3.4.5.5 shows the visualization of the taken picture's state after adding effect.

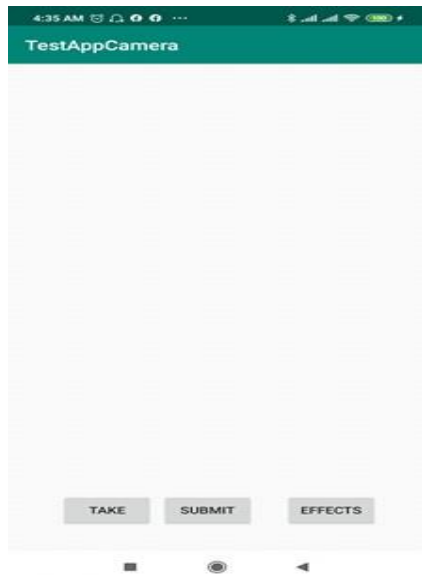


Fig 3.4.5.1: Home Screen



Fig 3.4.5.2: Take Picture Options



Fig 3.4.5.3: Taken Picture



Fig 3.4.5.4: Cropped Picture



Fig 3.4.5.5: Added Effect on Picture

3.5 DESCO Prepaid Service Development

PayWell App's has already DESCO Postpaid service on its app. But CloudWell Limited wanted to also add DESCO Prepaid service on their app. By this user can recharge their electric meter through this service.

3.5.1 Overview

When the users want to recharge their card, they will go to the PayWell Agent Point and give their bill number, mobile number and amount. And they can recharge their DESCO prepaid meter by PayWell App.

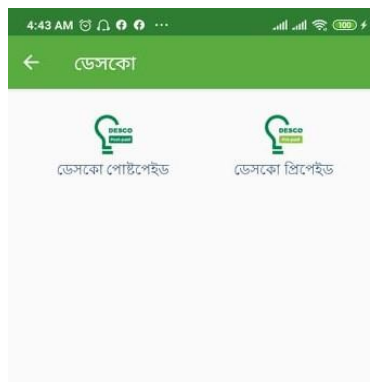


Fig 3.5.1.1: DESCO

3.5.2 Team

I was directly assigned to this task. Saidul Bhai has helped me a lot. He helped me to learn about this service and understand the requirements to complete the task. For API Md. Mustafizur Rahman and Tasnim Islam Hema have helped me.

3.5.3 Technologies

- ❖ Java
- ❖ Android
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- ❖ Web Services
- ❖ Zeplin
- ❖ Git

3.5.4 Tools

- ❖ Android Phone/Emulator
- ❖ Android Studio
- ❖ Web Services
- ❖ Postman
- ❖ Zeplin
- ❖ Git

3.5.5 DESCO Prepaid Development Process Details

This service has two modules. One is bill pay and another is Inquiry. Users can pay their DESCO Prepaid Bill and Check if the bill has been paid or not. Fig 3.5.5.1 shows the visualization of DESCO Prepaid Service's module.



Fig 3.5.5.1: DESCO Prepaid

Fig 3.5.5.2 shows the visualization of the DESCO Prepaid Bill Payment method.

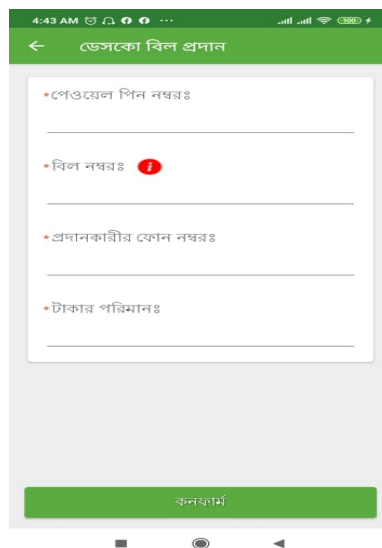


Fig 3.5.5.2: DESCO Prepaid Bill Pay

Fig 3.5.5.3 shows the visualization of the DESCO Prepaid Transaction Log Limit where users can select the limit of transaction log they want to see. And Fig 3.5.5.4 shows the visualization of the DESCO Prepaid Transaction Log.

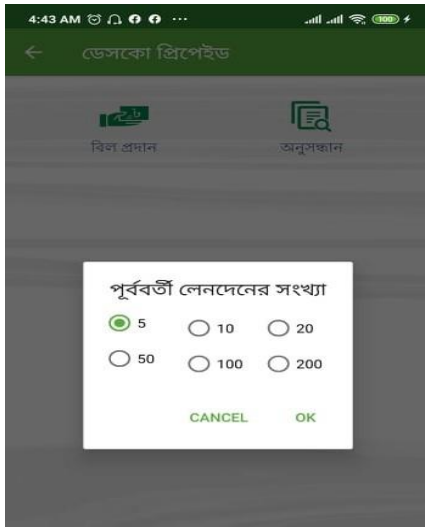


Fig 3.5.5.3: DESCO Prepaid Transaction

Log Limit



Fig 3.5.5.4: DESCO Prepaid

Transaction Log

3.6 Random UUID Generate for All Services

Random UUID (Universally Unique Identifier) is where a unique reference id will be generated for each transaction.

3.6.1 Overview

CloudWell Limited wanted to generate a unique reference id to its API. For every transaction they made through their app, they wanted to add this unique reference id for all of their services. So that they can track their transactions. I have generated a unique reference id in all their API. Where for every transaction they will get a new reference id. Also checked if it's working properly or not.

3.6.2 Team

I was directly assigned to this task. Saidul Bhai has helped me learn about random UUID and understand how it works. It helped to complete the task. For API Md. Mustafizur Rahman and Tasnim Islam Hema also have helped me.

3.6.3 Technologies

- ❖ Java
- ❖ Android
- ❖ Web Services
- ❖ Git

3.6.4 Tools

- ❖ Android Phone/Emulator
- ❖ Android Studio
- ❖ Web Services
- ❖ Postman
- ❖ Git

3.7 App Testing

Testing applications for software quality assurance is very important in app development. We can say that application testing is a process through which the functionality, usability, and consistency of the entire application are tested.

3.7.1 Overview

A big part of app testing for developers is white box testing, black-box testing, and pair testing. I basically did the pair testing here. Pair testing is a software testing technique where a developer tests another developer's development. This testing is done at Code

Level and UI Level. As a newcomer, I had to test all services for understanding about the core system of the app. I have found some unknown bugs while testing all the services and fixed them. I am so happy that my boss Kazi Bhai gave me this authority to work at the code level and fix bugs. I've learned a lot about coding levels for this.

3.7.2 Team

I was assigned to this task. Under the guidance of Saidul Bhai and Yasin Bhai I have tested the app on a regular basis to find any bugs on the app and fix them.

3.7.3 Technologies

- ❖ Android
- ❖ Web Services

3.7.4 Tools

- ❖ Android Phone
- ❖ Postman
- ❖ Soap UI

3.7.5 PayWell App Testing

All these services I had to test on a regular basis. While testing this I found some bugs and reported it to Kazi Bhai and Yasin Bhai. They fixed some bugs and sent them to me for retesting. I have re-tested them and fixed some bugs.

3.7.5.1 PayWell App: Pallibidyut Multi Form with Notification

I have tested whether the notification option for Pallibidyut service is working properly or not. I have also checked if multiple notifications were coming exactly or not.

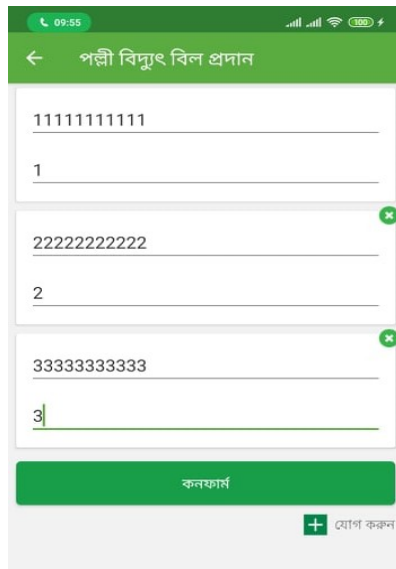


Fig 3.7.5.1.1: Pallibidyut Bill Payment
Multi Form



Fig 3.7.5.1.2: Pallibidyut Bill
Payment Multi Notifications

3.7.5.3 PayWell App: Statements

PayWell App has a module called Statements. Where users can see their mini statement, balance statement, sales statement and also transaction statement. I have also tested if it is working properly or not. I found some bugs here that was on UI level and API level. I've fixed the bugs that were on UI level and submitted some bugs to back end developers. They have fixed those bugs.

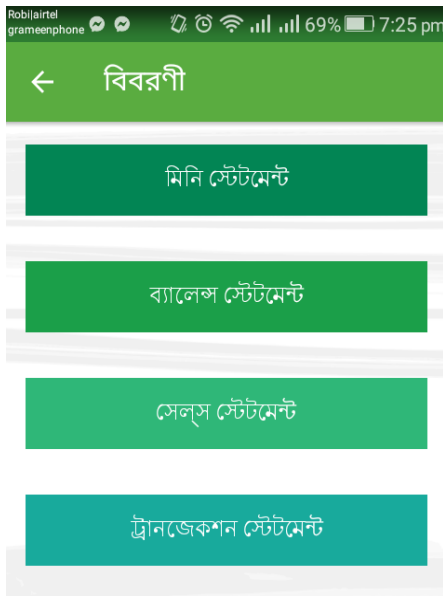
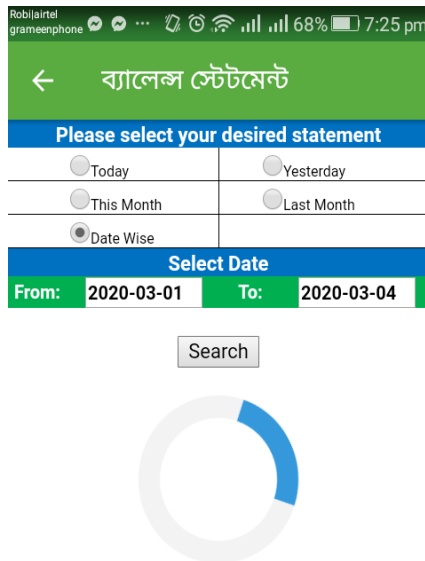


Fig 3.7.5.3.1: Statements

Mini Statement			
Date	04-Mar-2020	Time	07:25 PM
Current Balance: BDT 14.4			
PayWell	OTF	MYCash	bKash
13.42	0.00	0.00	0.98
Frozen		Available	
PW		14.4	
0.00			
Today's Balance Refill: BDT 0			
Purchase		0.00	
MYCash to PW		0.00	
Balance Refund		0.00	
Today's Sales : BDT 0			
Service Type	No. of Trx	Amount	Commission
Top-Up	0	0	0
Utility Bills	0	0.00	0.00
e-Tickets	0	0.00	0.00
Mobile Banking	0	0.00	0.00
Product	0	0.00	0.00
Total	0	0.00	0.00

Fig 3.7.5.3.2: Sample of Mini-Statement



Balance Statement				
Date	04-Mar-2020	Time	07:26:06 PM	
2020-Mar-01 To 2020-Mar-04				
Balance				
Title	PayWell	OTF	MYCash	Total
Opening	13.42	0.00	0.00	14.41
Added	0.00	0.00	0.00	0.00
Used	0.00	0.00	0.00	0.00
Current	13.42	0.00	0.00	14.41
Frozen	0.00	0.00	0.00	0.00
Available	13.42	0.00	0.00	14.41
PayWell : BDT 13.42				
MYCash : BDT 0.00				
OTF : BDT 0.00				

Fig 3.7.5.3.3 & Fig 3.7.5.3.4: Samples of Balance Statement

Sales Statement			
Date	04-03-20	Time	07:26 PM
Statement Period: 26-Feb-20 To 03-Mar-20			
Total Sales	BDT 338	Commission	BDT 7.77
Top-Up			
Top-Up Sales	BDT 338	Commission	BDT 7.77
Utility			
Utility Sales	BDT 0	Commission	BDT 0.00
Ticket			
Ticket Sales	BDT 0	Commission	BDT 0.00
E-Commerce(Sales/Buy)			
Sales/Buy	BDT 0	Commission	BDT 0.00

Fig 3.7.5.3.5: Sample of Sales Statement

Transaction Statement					
Date	04-03-20	Time	07:26 PM		
Statement Period: 26-Feb-20 To 04-Mar-20					
Total Sales	BDT	Commission	BDT		
2020-02-26					
Details	Amount	Debit	Credit	Balance	OTF
Opening Balance	0	0.00	5.65	5.65	0.0
Allocation	0	0.00	288.00	293.65	0.0
TopUp -01733774400	188	188.00	4.32	109.97	0.0
TopUp -01787679652	100	100.00	2.30	12.27	0.0
2020-02-27					
Details	Amount	Debit	Credit	Balance	OTF
Allocation	0	0.00	50.00	62.27	0.0
TopUp -01711363046	50	50.00	1.15	13.42	0.0

Fig 3.7.5.3.6: Sample of Transaction

3.7.5.4 PayWell App: TopUp

PayWell App has a service called TopUp. Users can recharge the balance on their mobile number through this service. It has two parts. One is All Operator and another is Brilliant. In All Operator, I have tested whether a user can recharge multi-operator's mobile numbers at the same time or not. And I tested the TopUp Inquiry for All Operator Option to see whether the mobile numbers were recharged or not. And also tested whether the Transaction Log working properly or not. In Brilliant, I have tested whether users can recharge their brilliant numbers or not. And also tested whether the TopUp Inquiry for Brilliant and Transaction Log working properly or not.

3.7.5.5 PayWell App: API Testing

When back end developers create an API for any service, they send it to the android developer. Android developers check if the API request and response are working properly or not. I have tested MNP TopUp, Bus Tickets, Nagad and DESCO Prepaid API.

CHAPTER 4

PROFESSIONAL GROWTH

4.1 Technologies and Tools I Learned

I have been allocated to work in a team, where they work on the android platform. Thus, all the things I have learned about are Android technologies.

In Bangladesh, free android software has been very popular. Most of us use free android software in our daily life.

4.1.1 Tool

Programing tools have made development painless. In my internship at CloudWell Limited, I have used the following tools in my regular tasks.

- ❖ Android Phone/ Emulator
- ❖ Web Services
- ❖ Android Studio
- ❖ Postman
- ❖ JSON Viewer
- ❖ Git
- ❖ Zeplin

4.1.2 Technology

I have gained knowledge of the following technologies in my internship time.

- ❖ Java
- ❖ Android
- ❖ XML
- ❖ SQL

- ❖ RDBMS
- ❖ UI
- ❖ JSON
- ❖ Web Services
- ❖ REST API
- ❖ Zeplin
- ❖ Git

4.2 Professional Learning

Completing this internship program, I have gained an understanding of android development and I also have learned to swiftly solve problems through coding.

- ❖ Java
- ❖ Android
- ❖ Web Services
- ❖ REST API
- ❖ Postman
- ❖ XML
- ❖ SQL
- ❖ JSON
- ❖ UI
- ❖ Zeplin
- ❖ Git
- ❖ Basic understanding of API

4.3 No bullying and blaming

Android development has always been about teamwork. In teamwork, misunderstanding happens. It's also true for CloudWell Limited. Although, I have seen everyone working in harmony with the project managers and team leaders.

Personally, in the last four months, I have made a lot of mistakes. But my project manager never treated me badly.

This approach to working well is much better. Criticizing people for their mistakes will not good for the situation. It will only make the situation worse.

CHAPTER 5

CONCLUSION

I have gained valuable knowledge of software organizations, their way of work, work surroundings and also known about software development by this internship program.

Taking part in a team meeting with team members and talking about possible ways to solve projects related problems, bug fixings, and security of the projects has helped me to know about actual threats in a software. Simultaneously, it has helped me to learn about the software organization's software lifecycle.

By completing this internship and working in a team, my teamwork capabilities have increased and I have learned to respect the team mate's plan and proposals. Brainstorming conversations with team members has helped me to recognize and solve many obstacles or else I would have faced many difficulties to solve them.

In general, doing this internship program has enlarged my programming understanding and I have become self-assured and hopeful that I can work in software fields.

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