Development of an Android Application on Product Directory for Waltonbd.

BY

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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 "**Development of an Android Application on Product Directory for Waltonbd.**," submitted by Khosnur Alam to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation was held on15 October 2020.

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DECLARATION

I hereby declare that I have done this project under the supervision of **Md. Reduanul Haque, Lecturer (Senior Scale), Department of CSE** Daffodil International University. I 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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Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Enriching existing customers to other products of Walton was the main objective of this internship. In order to do that, I have developed an android application that will cover all the existing products of Walton. And the customers can locate stores easily and also can order via their website by using this app. For developing this application, I have used some programming languages like JAVA, XML e.t.c. This application will come as by default application of the upcoming mobile phone. If a customer opens this app, he/she can find all the existing products of Walton and can buy it from where I believe this will help them a lot. That's why I've chosen my title as "Development of an Android Application on Product Directory for Waltonbd." I believe that will help my future career a lot.

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CHAPTER 1

Introduction

1.1 Introduction

Java programming languages Java was initially developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle) and released in 1995 as a core component of Sun Microsystems' Java platform.[1] Java has widely used languages all over the world since it was released. Plenty of devices run on java the new addition of java this time is in android development. Now, Google is trying to replace java with their language "Kotlin," but till now, developers use java for android development. In addition to android development, essential java isn't enough in the logic part; we have to use the predefined android library. For design, we can't use java's GUI framework as well there are some other XML libraries for the database I've used SQLite. For this project, I've used "Android Studio" by JetBrains. Android Studio was announced on May 16, 2013 [2]

1.2 Objective

The objective for this project focuses mainly on two things these are

- Users can access information about all products of Walton.
- Promote the products among Walton smartphone users.
- Reduce marketing costs.

So keeping this in my mind, I've decided to build a smooth UI and lightweight application. As a result, I've done it in this ongoing pandemic.

1.2.1 Assessing information of all products of Walton bd.

There is a considerable role of Walton in the smartphone industry in Bangladesh and also in the market well. So I've decided to this market segment to sell other products through these phones. First, I've thought and discussed many people in this sector to find the optimum solution. After this market analysis, I've decided to build an android application which will come as built-in in future phones. This application will contain all the

information on existing products and upcoming products. Additionally, this application will provide users to buy their desired product via Walton's website instantly.

1.2.2 Promoting other products.

Waltonbd is a renowned brand for smartphones and refrigerators in Bangladesh. Still, Walton has huge other products, for example, home appliances, air conditioners, smart tv and much more recently they've introduced Walton ceiling fans l.e.d light e.tc. We know promoting new products is a robust process and time consuming and, most importantly, cost worthy. My project can help them in this laborious process of expanding. It may reach some consumers. Who knows those reached people can bye this new product.

1.2.3 Reducing marketing cost

A big company like Walton is investing a significant amount of money in marketing the most expense in marketing is television advertisement or in the newspaper. In this era of technology, they need to give ads on online platforms as well. Using this application after some days, I believe they can reduce their marketing cost by 1-2%. Maybe this 1% sounds nothing, but for giant companies, this 1% could be millions.

1.3 Motivation

Walton has an existing business of smartphones. Why not use these smartphones to marketing other products ? This is the key idea behind this project.

Developing an Android application is a hot cake now in the tech industry because of its large market globally. Since I accept Internships, it seems to me I am a beginner and primary level to learn android development. Firstly, I was familiar with java earlier, but when I started coding, I've found that android has a huge new thing I have to acquire and am interested in learning and creating. Further, this project is related to a career as an android developer in the corporate environment.

1.4 Internship Goals

Captivating user interface:

The user interface of an application is a driving force behind its success. The UI should not only captivate users, but it should be consistent across different devices.

Powerful App Maintenance:

In a competitive market, an app doesn't only have to be successful, but it should also have to sustain its success. For an app to maintain its success, it needs to adapt to the needs of the users. For this, the app needs to introduce new features and release updates to the app for creating engagements.

1.5 Report Layout

The format consists of things like the bankruptcy goal, the margins, the road spacing, the pagination, and the incorporation of the equation, illustrations, and references. With this document format, I outline the format capabilities of this document, consisting of the web page layout of the document and the document data's numeric layout. When I use the format functions, I can set parameters for the document. When I outline a document format, I outline a plan especially for a statement, and I can extrude the same old layout assigned to a document.

In Chapter 1, I point out information about the introduction. Objective.

The goal consists of a few centers approximately internships consisting of saving, selling new merchandise and decreasing value etc.

The motivation for this mission is the marketplace call for and plenty more.

Chapter 2 describe internship employer like approximately the company, Products

offerings offered, roles withinside the process marketplace and obligations.

Chapter three include internship roles, and obligations assigned duties, painting environment, the use of internet improvement mission temples completed responsibilities with figures and cited jobs.

Chapter four describes internship effects; a few internship effects are issues and answers like Android studio demanding situations and making this app for price range telephone friendly. And gaining knowledge of effects, demanding situations.
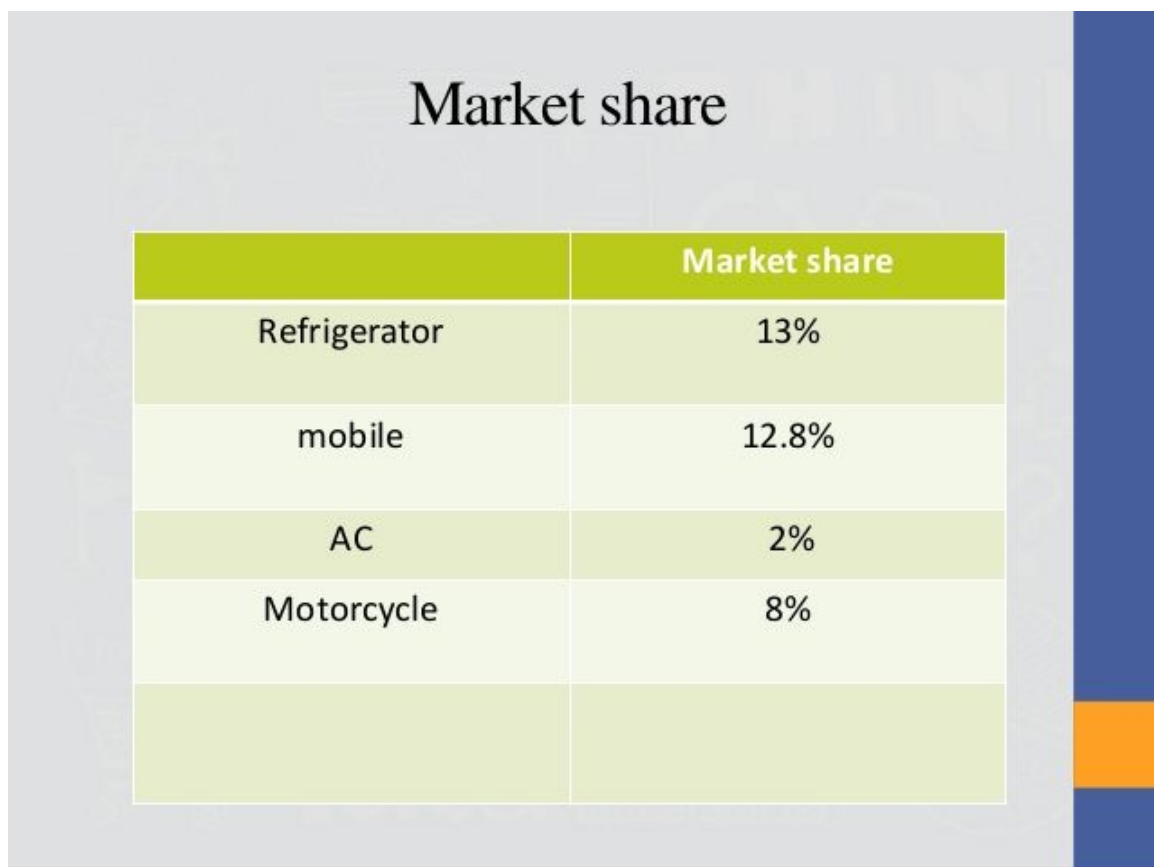
In Chapter 5, I even have cited the internship dialogue and conclusion.

CHAPTER 2

INTERNSHIP ENTERPRISE

2.1 About the Company

Walton High-Tech Industries is an oligopoly in the electronics industry of Bangladesh. They are the first company who is building electronic items in Bangladesh. Before their attempt, the sector was import-based, and we have to expend our valuable foreign currency for electronic products. They are also exporting their product in many countries. This company was started in 1977 by "Mr. S.M Nurul Alam Rezvi" [3].

Market share

	Market share
Refrigerator	13%
mobile	12.8%
AC	2%
Motorcycle	8%

Figure 2.1

In figure 3.1, there's an approximate market share Walton tried to visualize. No other company is leading in the market now. Walton is expanding its business in the technology sector, such as making smartphones and now laptops producing SSD and rams. Within the next few years, they will lead to the industry of Bangladesh.

Corporate Head office:

Walton High-Tech Industries Ltd.

Plot-1088, Block-I, Sabrina Sobhan Road

P.O-Khilkhet, P.S-Vatara,

Bashundhara R/A, Dhaka-1229.

008809606-555555

info@waltonbd.com

Factory Address:

Walton Hi-Tech Ind. Ltd.

Chandra, Kaliakoir, Gazipur.

Walton Digi-Tech Ind. Ltd.

H#00013, Block-B, Building-03

(2nd & 3rd Floor), Ward-02,

Boroichuti, Kaliakoir, Gazipur

2.2 Product and Market Situation

Walton offers its customers many home appliances and electronics products. Some are as follow

- Refrigerator
- Smartphones
- Feature Phones
- Laptop
- RAM
- SSD
- Keyboard
- Television (Smart and Basic)
- Air conditioner
- Ceiling Fan

And a lot more. Apart from this, they have strong R&D in Bangladesh. In my internship period, there are two massive successes of R & D that should be mentioned here.

We know we're on an ongoing pandemic this time, which is COVID-19, but just before the pandemic started, Walton has introduced a brand new operating system for TV named ROS.[4] After this Walton tries to make a low-cost ventilator for covid19 patient, as a result, they have given four prototypes for clinical trials to the government. [5]

2.3 SWOT Analysis

STRENTHS

- App provides alternative to loading issue on webpage and kiosk
- Higher presence promotes brand awareness
- Modernized mobile and social media user experience
- Multifunction capable mobile app

WEAKNESSES

- Digital presence is not firmly established
- Social media platforms are under utilized
- Customers – Bad experience with current website and kiosk

OPPORTUNITIES

- More engagement with customers
- Increase and develop a stronger online presence
- Improve online customer experience
- Regain lost ridership through online engagement and campaigns
- Project the value of the brand to the consumer

THREATS

- Some competitors have strong online presence
- Some competitors have ongoing digital campaigns
- Bad user experience could lead to lost consumers

Figure: 2.2 SWOT analysis .

CHAPTER 3

Tasks, Projects & Activities

3.1 Daily Task & Activities

In this time of internship period a massive pandemic is going on we all know that that's why The government of Bangladesh declares a public holiday. That's why no one can't do it in person. We all had to "work from home". But I have to give a report on a regular period in this internship period. Usually after 1-2 days we've to submit our report.

In the internship period I had to do this type of work which was assigned by the authority.

- Introduction of Android
- Android Layout
- Xml
- List View
- Fragmentation
- Adapter View
- Splash Screen
- Interface

3.2 Events & Activities

By following the procedure I've successfully completed the work on time and the company was happy with my work.

Introduction of android

Android could be a quick application improvement for native Android applications, created, and any

other computer code. B4A is AN choice in distinction to programming with Java.

Android uses A.B.D. manager and person program run time. Before the runtime

debugging the program. android ink was supported in Palo Alto of C.A.C.A., U.S. U.S.

by Andy Rubin, Rich Miner Nick, and Charis white in 2003.it is uses may be camera,

music player, tablet P.C.P.C., T.V.T.V.,

Web browser etc. The language itself is like Visual Basic and Visual Basic .Net,however,

is adjusted to the native robot surroundings. B4A is writing primarily based and occasion

driven language.B4A produces normal marked robot applications that may be

transferred to application stores like Google Play, Samsung Apps and Amazon Apps.

Android Layout

A Layout deals with the set up of contraptions, (for instance, Text, Buttons, and Edit

Text)

as we discover within the application management. All the android layout manifest file,

XML file,

app file resource and java programming and style the XML file web-connected the

manifest file and uses the Layout.

Layouts 2 normally uses

Linear Layout and

Relative Layout

There is a few a lot of layout use

List view Layout

Grid view Layout

Frame Layout

web view Layout

Linear Layout

Linear Layout could be a view cluster of all children in a single line, vertical and

horizontal.

Relative Layout

Relative Layout could be a layout is read cluster show child views in close position. The

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position may be specified as close to relative parts corresponding to (Left or below

another

view)

List View

A list read all list variety show the list serial maintain the view group

Shown in fig below.

Figure: 3.2.1 List View

Grid View

A Grid View Layout is a Grid place vertical and horizontal line all use grid group

Grid manner as shown in figure below.

Figure 3.2.2 : Grid View Layout

Web View Layout

Web view layout is a content of the online system programming into any link the system uses by Google online Server.

Figure 3.2.3 : Web View Layout

Android Splash screen

Usually the android splash screen that is open on the phone then splash screen use. it is

a basic consistent screen for a hard and fast the other time that is use totally different company name

and brand chart, commercial enterprise content thus on.

Fragmentation

The danger or worry that Associate in Nursing growth of swerve variations of the mechanical man stage can bring about the failure of sure gadgets to fitly run applications composed with the Android SDK. With a vast variety of custom renditions of the mechanical man stage developing, the fear is that abilities are debilitated owing to the potential for applications fancied expressly for one variation or convenience not having the choice to work with others. Google has made an Android similarity program to help subdue fears of Android discontinuity and has additionally regarded the possibility of Android fracture a "bogeyman" in an ongoing website, but worries concerning convenience specific applications prompting ability problems continue in any case.
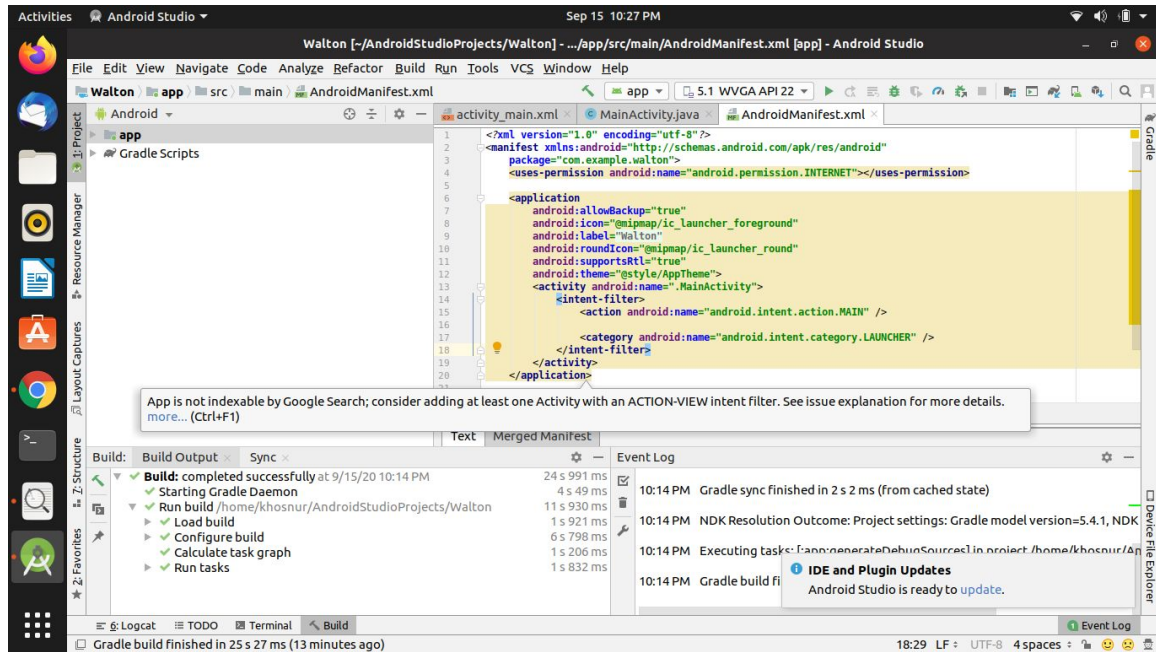
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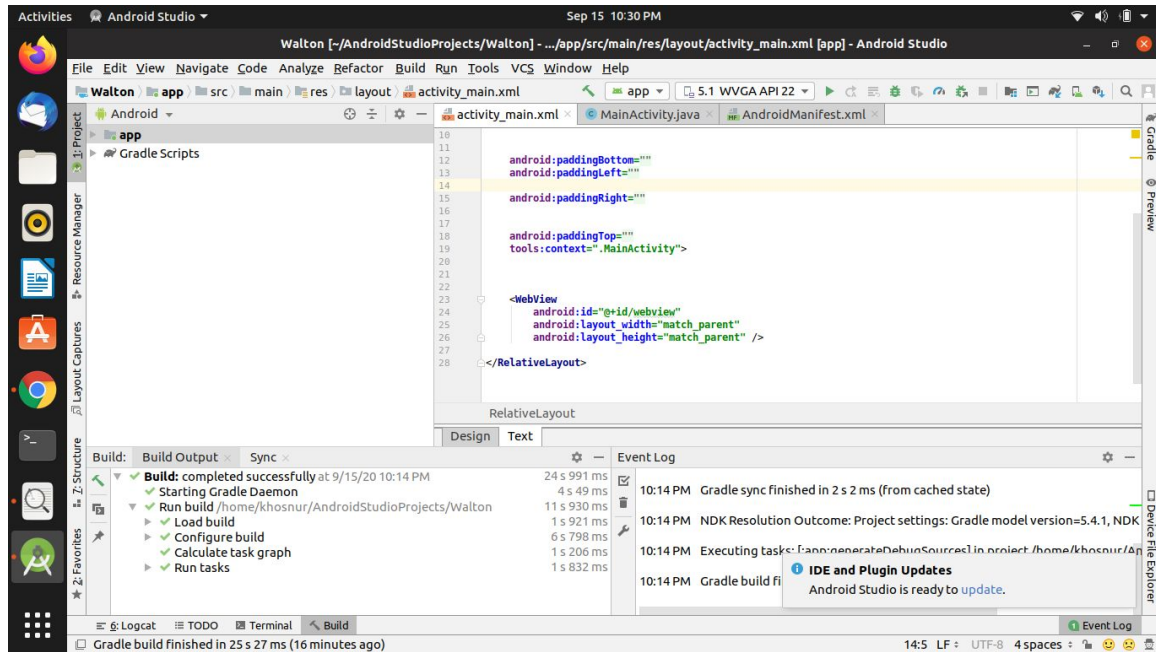
Figure 3.2.4: Android of manifests file
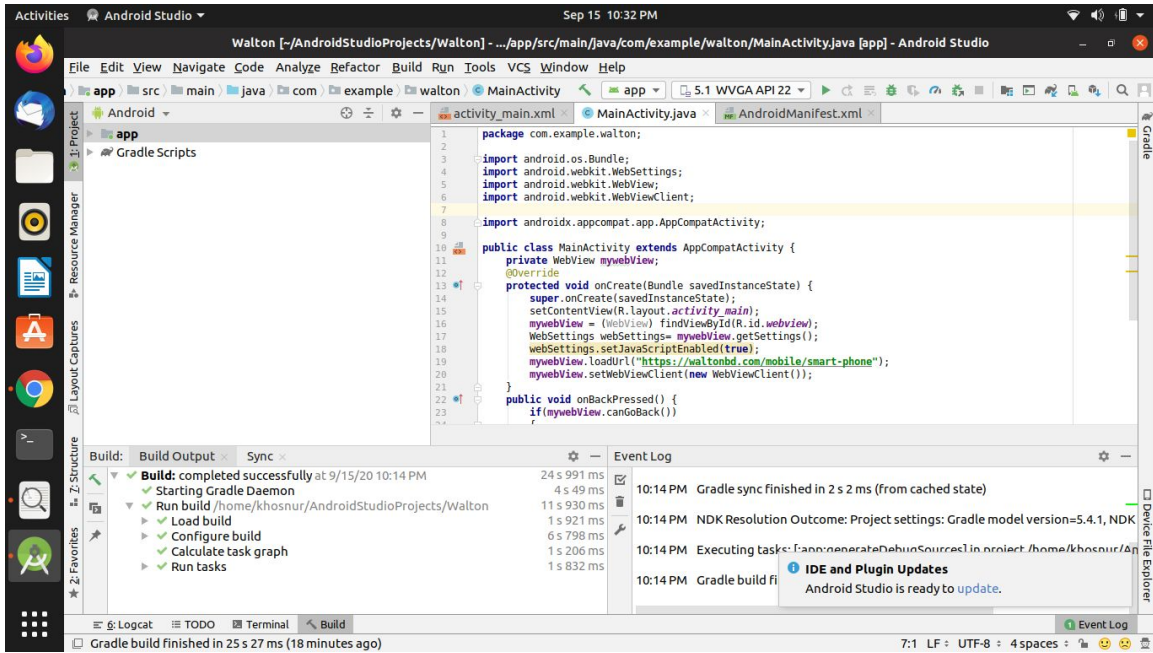
Figure 3.2.5: Android of xml file

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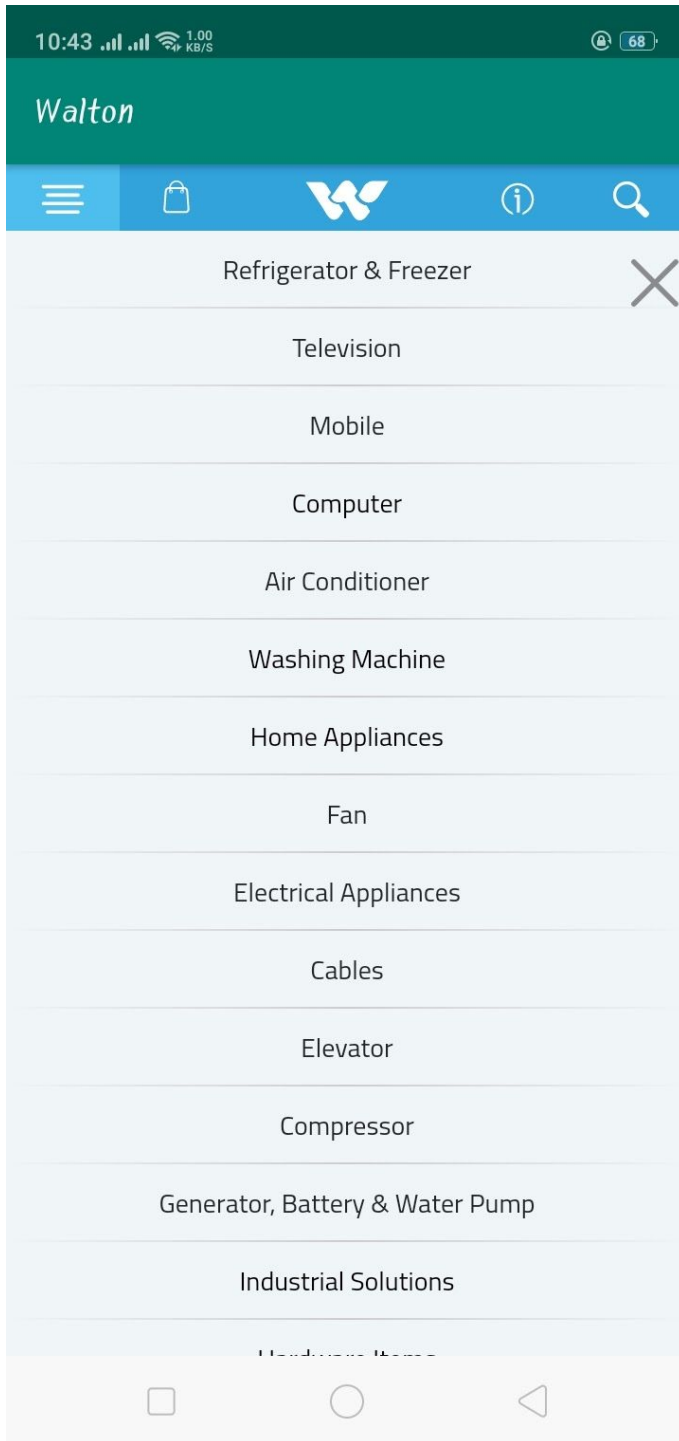Figure 3.2.6:Android of Java file
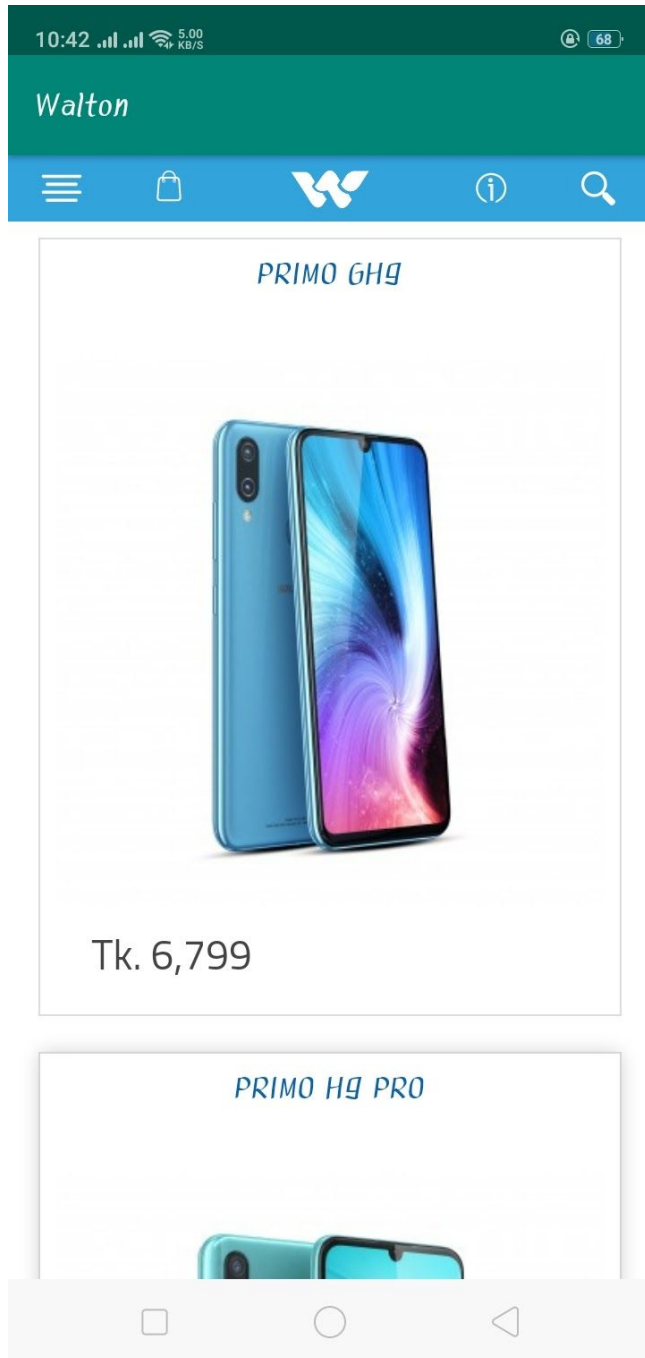
Figure 3.2.7: Design of Product Directory (A)

Figure 3.2.8: Design of Product Directory (B)

3.3 Project Task & Activities

I have completed my internship from Waltonbd Ltd. it has been the most effective chance and working with a team. Task work it's dynamic over accessible contributions to wanted yields whereas expenditure distributed assets. enterprise movement is often used as an elective term to increase tasks. Activities gap venture work into the smallest items to make it less complicated for endeavor to understand what activities to try and do. every movement is constantly connected with a transparent break objective or target. Conditions and interrelationships between many exercises interface these exercises to 1 another and center them around achieving one and an identical objective or goal. Exercises of a venture are perpetually quantitative, time, and projected by making outstanding outcomes. I will think pictured within the attendant things:

- Design the XML file,
- Produce the android project, and produce an outline report.
- Update some existing project

3.4 Challenges

Android application development involves tons of challenges for each employee/intern the different kind challenge downside, it involves downside solve with confidence within the time internship. once on-line to gather knowledge and restricted the matter I even have frolicked for learning the way to appointed market place skilled surroundings and new individuals andworking.Android Developer Challenge was 1st reportable in Gregorian calendar month, with entries being acknowledged from a pair of Gregorian calendar month to fourteen Gregorian calendar month 2008. With members from over seventy nations and an combination of one,788 sections, the ADC was a fast accomplishment, and the AndroidDevelopers' blog detailed an accommodation rate of 170+ entries every hour on 14 April.Engineers from the us painted 33% of the all out applications whereas the rest originated from nations, as an example, Germany, Japan, China, India, Canada, France, UK,and various others. The passages spoke to a special scope of use territories, including diversions, person to person communication applications, utilities and potency and designer instruments

CHAPTER 4

Competencies & Smart Plan

4.1 Competencies Earned

Android application primarily based is functioning fluently the project success and consumer need marketplace is the best project market scenario. For example, if anyone provides an android project however their info isn't responsive enough. which means sensible project the sector and competency of the market if learn basic and technical level operating to success. Hard working success is a tiny time. trendy competency sincerely the great project creates the present front the consumer. Otherwise you lost the marketplace. Own the well-liked best policy within the computer code developer.

4.2 Smart Plan

Most conspicuously learn to concerning the way to work android application development :

- It's crucial to all or any of the terminals if you wish to perform higher.
- Rigorously find out about xml file, interface, adapter, Manifest file, apk, and java how
- to work the management system.
- Produce each fault report, outline report, causation SMS and Mail in an exceedingly means that it
- Can be responsive on each device the user opens. And for doing therefore use responsive
- perspective and straightforward step.
- Cross-check several devices and sensible technology for distinctive screen resolutions and ideas.
- Unleash gain plan in an exceedingly distinctive means.
- Android project offer all time follow the computer code if any time software is down

- For security reasons I can't value-added more data and any figure for this half.

4.3 Reflections

I get the impression that android supports reflection Reflection is clearly, a awfully helpful part of Java and android advancement. However, this reflection will frequently be the wellspring of important log jam within an android application. Perhaps the foremost natural method for understanding this is often experiencing many real examples.

- Less time to complete report
- Results are determined physically.

CHAPTER 5

Conclusion & Future Career

5.1 Discussion & Conclusion

From that internship, android is the preferred OS within the world. i will discuss the importance of the internship program android OS use by java programming and kotlin. For all sensible expertise, education, and ability internship programs develop my session analysis. Project on a topic of Product Directory in a very android also maintenance to develop it in a palmy manner. Project applicable humanoid application is needed so. The foremost obvious individuals name the android smartphones the most end-user operating system. The shopper between service and management of the client opinion ridiculing,pharming, and completely different malevolent i will be able to collect kind the billet will profit me in my close to future.

5.2 Scope for Further Career

Internship goals offer incredibly sensible clear constructs regarding sensible and linguistics about android base systems. My internship enforced an indication of construct for a call making

system mistreatment imitated information. I'm attentive to operating the duty. Finding a duty or career good job and marketplace. Own this performance is a way to challenge the market place I'm identified to folks present our project and also at the same time.

- Work to the software package company
- Sensible Communication
- Ability to teamwork
- Work as Associate in Nursing automaton Base System

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