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Faculty of

Computers & informatics

Information Technology department

Share and Sell Your Extra Staff

“Badlny”

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Abstract

It’s the need that drives us to invent new technologies, so, on seeing an opportunity to make life easier, we must take advantage of it very well.

All of us has faced the situation when you used something and you are not in need of it anymore, so, if you have the chance to exchange it or maybe even sell it for a better and more useful item, then, this would be rather very useful, these items may vary from simple old phone to even a house or a car.

So, based on these criteria we decided to make an application that provide these services at the fingertip of the users and all in no time as it’s a client-to-client application.

The idea is to make the application as user-friendly as possible and also professional, so that it will give the client a good feeling of safety on trading using the application.

Also, we give the client the option to back off the deal whenever they want through deleting the item from their profile.

The application will also have a scam-prevention system in the future in which we will add options to prevent theft, scam or putting high prices on items, this system will allow the user to safely sell and trade their items with the right prices for these items, this will give the client a safer atmosphere for their selling and trading deals, thus, increasing the number of users using the application.

Application Development Process

We can divide our application's plan work into main four parts:

A- Learning android developing basics (took four weeks)

Before developing our application, we needed to read about android because knowledge about android developing was not sufficient enough to start developing the project.

B- Server developing Using PHP language: (took four weeks).
C- Developing the rest of our application services (took two months).
D- Application final testing and interface (took two week).

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Chapter 1:

Brief introduction

1.1: Introduction

- This Chapter is divided into five Sections: Section 1.1 represent the introduction of the Chapter, Section 1.2 project field, Section 1.3 problem Description, Section 1.4 the project objectives, Section 1.5 Importance and relevance to people, section 1.6 the overall project.

1.2: Project field:

- Mobile Application (android).

1.3: Problem description:

- The problem that may face us when we want to exchange product by product that we need much time to find it on other side when we want to buy a new product we need to do more shopping to find it .

1.4: Project Objective:

- We think if you have your mobile application that has ability exchange and buy products and the deal is done among customers only by adding your product and determine if you want to exchange it or sell it by calling the customer directly.

1.5: Importance and relevance to people:

- this application can save much time and effort for all customers and it makes the deal more easily among customers and it can help people to benefit from other things that they want to get rid of them.

1.6: The overall project:

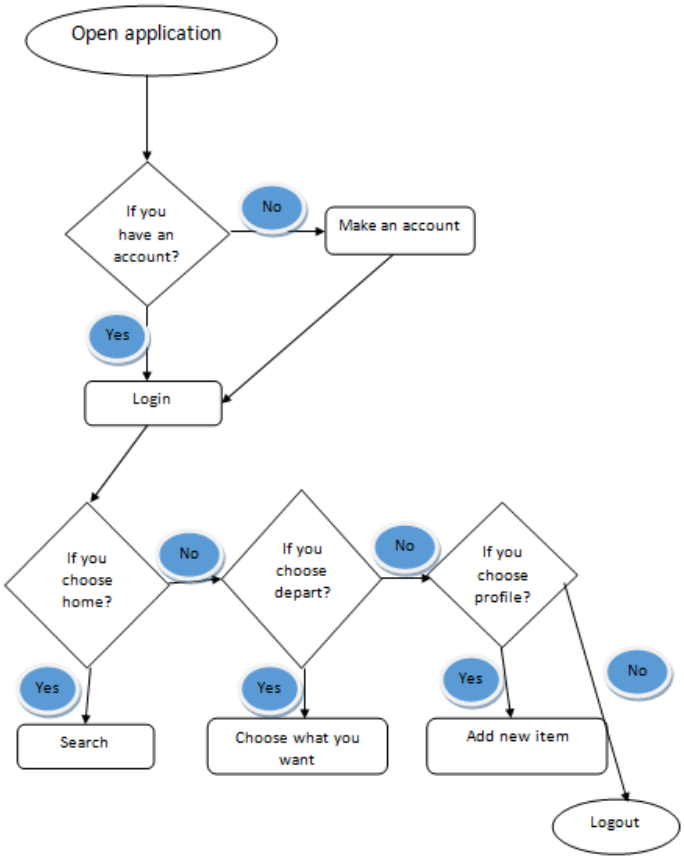

Figure 1:overall project

The diagram explains general idea about the project. When you open the app, the welcome screen will launch for few second, if you have account you can go to the login page and if you don't have firstly you should register in the application and login to it after login you will become in the home page, In the home page you can choose or search for a specific item or browse the application from the navigation.

Preface

With the development in technologies we need to consume less time and without any effort, in chapter one we will talk about the introduction of the application and the project field and the description of the problem and project objective for achieves the importance and the relevance to people that want to exchange their items with each other instead of get rid of this product's other people may be benefit from it.

In chapter two we will talk about system analysis functional and non-functional requirements and business, system and user requirements and the main stakeholder of the system.

After that we will talk about the required tools and knowledge that you will need to open the project and understand it easily, we will talk about android studio IDE and how to download it with all libraries and packages and importance of the android to people, its features, devices in the market and the anatomy of an android application, java, php programming language and xml extensible Mark-up Language.

Then we will talk about the detailed description of the application that divided into two parts: firstly back-end sub-system and how it is work use-case and the anatomy of database and the ERD with its relationship and the services by using php scripts on free hosting www.000webhost.com .

secondly front-end sub system chapter we will indicate how the design of all screens is designed in android studio by using xml for design and how all pages are connected to each other from scratch and how to deal with all screens and how to get the product that you need to exchange or sell it. Then we will take about the conclusion and future work.

Chapter 2:

System Analysis

2.1: Introduction

In this chapter description requirements to building this project, In Section 2.1 introduction to this chapter, Section 2.2 Functional requirement, Section 2.3 Non-functional requirement, Section 2.4 system requirement, Section 2.5 User requirement, Section 2.6 business requirement.

2.2: Functional Requirement:

- **Process-oriented:** The process the system must perform.
- **Information-oriented:** Information the system must contain.

1: LOGIN IN & Registration

The application allows all clients to sign up and login.

2: Add Products

The application allows clients to add their products.

3: search for products

The application allows browsing and searching by name for a specific product.

4: find product

After you will be finding a specific product you can call the owner or go to him with google maps direction.

5: Exchange product or buy it

You will contact with the owner of the product for dealing with him/her.

6: Delete sold product

Each client has a personal profile; after deal is done you should delete it from the list of your products.

2.3: Non-functional requirement:

1: Operational

The database will be constructed to add clients and products by clients. System will be run on Mobile application.

2: Performance

The news of products will be displayed quickly.

Interface of the application will be simple.

3: Security

Client's information will be secured.

4: Culture & political:

Cultural and political factors and legal requirements that affect the system.

2.4: System requirement

Hardware

Software

2.5: user requirement

What the clients need to do.

2.6: Business requirement

Business Goals and Objectives:

The main objective of this project is helping clients to Exchange and buy products easily from home from their smart phones.

Project Description:

The problem that may face us when we want to exchange product by product that we need much time to find it on other side when we want to buy a new product we need to do more shopping to find it.

Scope:

Facilitate process of Exchange and buy product from home.

Stakeholder:

People who have application considered the main stakeholder of this system.

Chapter 3:

Required Tools

3.1: Introduction

In this chapter required tools to run this project, In Section 3.1 introduction to this chapter, Section 3.2 Applications languages and API's used, Section 3.3 introduction to **ANDROID**, Section 3.4 introduction to **JAVA**, Section 3.5 introduction to **XML**, Section 3.6 introduction to **PHP**.

3.2: Applications languages and API's used

Languages used:

1- Java language

2- PHP language

3- XML language

Applications used:

1- Net beans
2- Android SDK
3- Android NDK

API's and Web services used:

1- Web Service by Free hosting on www.000webhost.com
2- Google Maps API'S https://www.google.com/maps

3.3: Android

3.3.1: android briefly

Android is a mobile operating system that is based on a modified version of Linux. It was originally developed by a start-up of the same name, Android, Inc. In 2005, as part of its strategy to enter the mobile space, Google purchased Android and took over its development work (as well as its development team).

Google wanted Android to be open and free; hence, most of the Android code was released under the open-source Apache License, which means that anyone who wants to use Android can do so by downloading the full Android source code.

Moreover, vendors (typically hardware manufacturers) can add their own proprietary extensions to Android and customize Android to differentiate their products from others. This simple development model makes Android very attractive and has thus piqued the interest of many vendors.

This has been especially true for companies affected by the phenomenon of Apple's iPhone, a hugely successful product that revolutionized the smartphone industry. Such companies include Motorola and Sony Ericsson, which for many years have been developing their own mobile operating systems. When the iPhone was launched, many of these manufacturers had to scramble to find new ways of revitalizing their products.

These manufacturers see Android as a solution — they will continue to design their own hardware and use Android as the operating system that powers it. The main advantage of adopting Android is that it offers a unified approach to application development. Developers need only

develop for Android, and their applications should be able to run on numerous different devices, as long as the devices are powered using Android. In the world of smartphones, applications are the most important part of the success chain. Device manufacturers therefore see Android as their best hope to challenge the onslaught of the iPhone, which already commands a large base of applications.

3.3.2: What is Android application version?

Android is software for mobile devices that includes an operating system and key applications. Google Inc. purchased the initial developer of the software, Android Inc., in 2005. Android's mobile operating system is based on the Linux kernel.

Google and other members of the Open Handset Alliance (business alliance of 80 firms to develop standards for mobile devices) collaborated on Android's development and release. The Android Open Source Project (AOSP) is tasked with the maintenance and further development of Android. The Android operating system is the world's best-selling Smartphone platform.

Android has a large community of developers writing applications ("apps") that extend the functionality of the devices. There are currently over 200,000 apps available for Android. Android Market is the online app store run by Google, though apps can also be downloaded from third-party sites. Developers write primarily in the Java language, controlling the device via Google-developed Java libraries. The Android operating system includes the Linux kernel.

The unveiling of the Android distribution on 5 November 2007 was announced with the founding of the Open Handset Alliance, a consortium of 80 hardware, software and telecom companies devoted to advancing open standards for mobile devices. The Android operating system is used on Smartphones, notebooks, tablets, Google TV and other devices.

3.3.3: What are Features of Android?

As Android is open source and freely available to manufacturers for customization, there are no fixed hardware and software configurations. However, Android itself supports the following features:

Storage: Uses SQLite, a lightweight relational database, for data storage. **Connectivity:** Supports GSM/EDGE, IDEN, CDMA, EV-DO, UMTS, Bluetooth (includes A2DP and AVRCP), Wi-Fi, LTE, and WiMAX. Chapter 8 discusses networking in more detail.

Messaging: Supports both SMS and MMS.

Web browser: Based on the open-source Web Kit, together with Chrome's V8 JavaScript engine

Media support: Includes support for the following media: H.263, H.264 (in 3GP or MP4 container), MPEG-4 SP, AMR, AMR-WB (in 3GP container), AAC, HE-AAC (in MP4 or 3GP container), MP3, MIDI, Ogg Vorbis, WAV, JPEG, PNG, GIF, and BMP **Hardware support** — Accelerometer Sensor, Camera, Digital Compass, Proximity Sensor, and GPS

Multi-touch: Supports multi-touch screens

Multi-tasking: Supports multi-tasking applications

Flash support — Android 2.3 supports Flash 10.1.

Tethering: Supports sharing of Internet connections as a wired/wireless hotspot

3.3.4: Android Devices in the Market

Android devices come in all shapes and sizes. As of late November 2010, the Android OS can be

➢ Smartphones

➢ Tablets

➢ E-reader devices

➢ Netbooks

➢ MP4 players

➢ Internet TVs

Chances are good that you own at least one of the preceding devices. Another popular category of devices that manufacturers are rushing out is the tablet. Tablet sizes typically start at seven inches, measured diagonally the Samsung Galaxy Tab and the Dell Streak, which is a five-inch phone tablet. Besides smartphones and tablets, Android is also beginning to appear in dedicated devices, such as e-book readers,

In addition to these popular mobile devices, Android is also slowly finding its way into your living room. People of Lava, a Swedish company, have developed an Android-based TV, call the Scandinavia Android TV Google has also ventured into a proprietary smart TV platform based on Android and co-developed with companies such as Intel, Sony, and Logitech.

3.3.5: Download Android

Now that you know what Android is and its feature set, you are probably anxious to get your hands dirty and start writing some applications! Before you write your first app, however, you need to download the required tools and SDKs. For Android development, you can use a Mac, a Windows PC, or a Linux machine.

All the tools needed are free and can be downloaded from the Web.

https://developer.android.com/studio

Most of the examples provided in this book should work fine with the Android emulator, with the exception of a few examples that require access to the hardware. So, let the fun begin!

3.3.6: Java JDK

The Android SDK makes use of the java SE Development kit (JDK).

Hence, if your computer does not have the JDK installed, you should start by downloading the JDK form www.oracle.com/technetwork/java/javase/downloades/index.html

And installing it prior to moving to the next section.

3.3.7: Anatomy of an Android Application

Now that you have created your first Hello World Android application, it is time to dissect the innards of the Android project and examine all the parts that make everything work. First, note the various files that make up an Android project in the Package Explorer in java. The various folders and their files are as follows:

➢ Src: Contains the .java source files for your project.

➢ Android library: This item contains one file, android.jar, which contains all the class libraries needed for an Android application.

➢ Gen: Contains the R.java fi le, a compiler-generated file that references all the resources found in your project. You should not modify this file.

➢ Assets: This folder contains all the assets used by your application, such as HTML, text files, databases, etc.

➢ Res: This folder contains all the resources used in your application. It also contains a few other subfolders: draw able-, layout, and values.

➢ AndroidManifest.xml: This is the manifest file for your Android application. Here you specify the permissions needed by your application, as well as other features (such as intent filters, receivers, etc.).

3.4: Java

Java is a general-purpose computer-programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation.

Java applications are typically compiled to byte code that can run on any Java virtual machine (JVM) regardless of computer architecture. As of 2016, Java is one of the most popular programming languages in use, particularly for client-server web applications, with a reported 9 million developers. Java was originally developed by James Gosling at Sun Microsystems (which has since been acquired by Oracle Corporation) and released in 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low-level facilities than either of them.

The original and reference implementation Java compilers, virtual machines, and class libraries were originally released by Sun under proprietary licenses. As of May 2007, in compliance with the specifications of the Java Community Process, Sun relicensed most of its Java technologies under the GNU General Public License. Others have also developed alternative implementations of these Sun technologies, such as the GNU Compiler for Java (byte code compiler), GNU Class path (standard libraries), and Iced Tea-Web (browser plugin for applets).

The latest version is Java 10, released on March 20, 2018, [23] which follows Java 9 after only six months [24] in line with the new release schedule. Java 8 is still supported but there will be no more security

updates for Java 9. [25] Versions earlier than Java 8 are supported by companies on a commercial basis; e.g. by Oracle back to Java 6 as of October 2017 (while they still "highly recommend that you uninstall"[26] pre-Java 8 from at least Windows computers).

3.5: XML

Android layouts are written in extensible Mark-up Language, also known as XML. Much like HTML (or Hypertext *Mark-up Language*), XML is also a mark-up language. It was created as a standard way to encode data in internet-based applications. However, *unlike* HTML, XML is case-sensitive, requires each tag is closed properly, and preserves whitespace.

Much like creating an HTML layout and later altering it with jQuery, as we've done in previous courses, we can create XML layouts in Android, and later alter them using Java logic.

Android XML layouts are also part of a larger umbrella of Android files and components called resources. Resources are the additional files and static content and application needs, such as animations, color schemes, layouts, menu layouts.

3.6: Php

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Ramus Lerdorf unleashed the first version of PHP way back in 1994.

- PHP is a recursive acronym for "PHP: Hypertext Pre-processor".
- PHP is a server-side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the UNIX side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible.
- PHP Syntax is C-Like.

Chapter 4:

Detailed description of the application

4.1: Introduction

In this chapter main work, In Section 4.1 introduction to this chapter, Section 4.2 Back end sub system, Section 4.3 front end sub system.

4.2: Back-end sub-system

Here we will show how the use case of the system is work and the tables of data base.

4.2.1: Use case

User can exchange products with other user by using Badlny application, but first he must have an account. If he doesn't have account he will make an account and sign up. User can post his products to all other users. He can delete his product if it is exchanged or sold with another user.

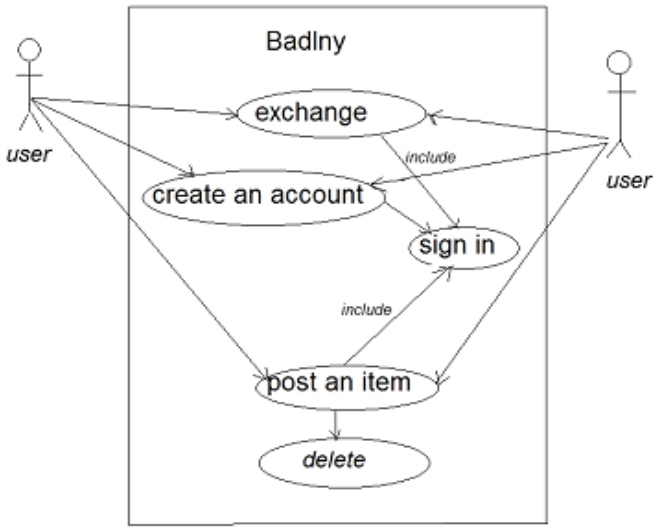

Figure 2:use case

4.2.2: database

A **database**-management system (DBMS) is a computer-software application that interacts with end-users, other applications, and the **database** itself to capture and analyse data. A general-purpose DBMS allows the definition, creation, querying, update, and administration of **databases**

Scenario:

Exchange product is an application that allows users to exchange their products with each other easily without money .each user has personal information such as: user-id this is unique for each user, user-name, user-email, password, and phone-no. , capital, latitude and longitude .each product has some information: product-id is unique for each product, user-email to communicate with the owner of the product ,product-name ,type, brief description of the product, the price of the product, capital, photo-url provide a picture to the product and phone-no. of the owner .

Each user can communicate with the owner of the product by using user account that is found in the description of each product.

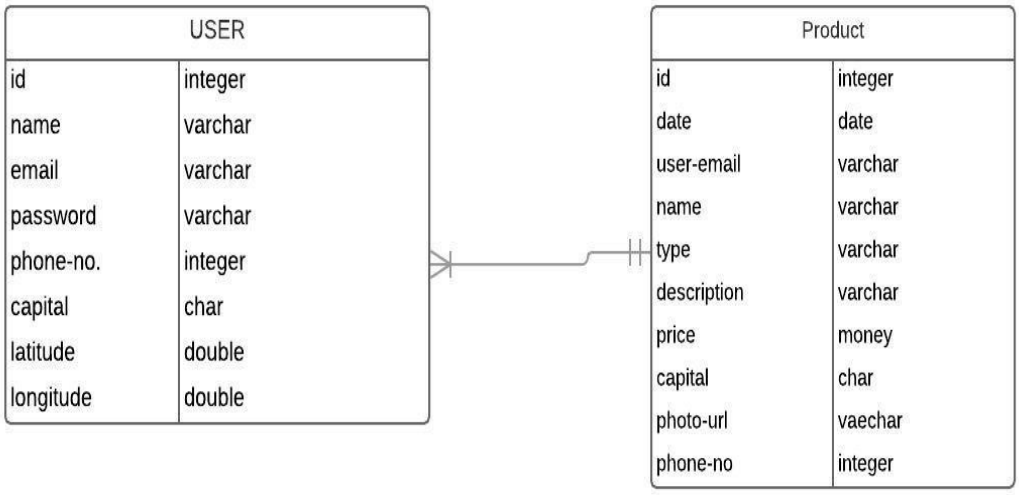

Figure 3: Database Table

Screen for adding new user in data base:

user_id	user_name	email	password	phone	capital	latitude	longtitude
48	Ahmed	ahmed@yahoo.com	123456	01227390756	zagzaig	30.5887955	31.4880324
49	Bassam khaled	bassam@yahoo.com	123456	012286412513	zagzaig	30.5953006	31.5174666
50	marim	marim@yahoo.com	123456	01227390756	zag	30.5977454	31.5173718
51	mody	mody@yahok.com	123456	01227390756	cairo	30.5977454	31.5173718

Figure 4:adding new user

Php script Screen for adding new user:

```php
<?php

if(isset($_POST['email'],$_POST['password'],$_POST['name'],$_POST['phone'],$_POST['capital'],$_POST['lat']
    ,$_POST['long'])){
    $username = $_POST['name'];
    $email = $_POST['email'];
    $password = $_POST['password'];
    $phone = $_POST['phone'];
    $capital = $_POST['capital'];
    $lat = $_POST['lat'];
    $long = $_POST['long'];

    $check = false;
    include "Connection.php";

    $getuserssql="SELECT user_id FROM user where email = '$email';";
    $users = $dbconnect->query($getuserssql);

        if($users->num_rows > 0 )
        {
            $check = true;
            echo "It's Already Registered! " ;
        }
        if($check==false){
            $insertusersql="INSERT INTO user (user_name, email, password, phone, capital,latitude,longtitude) VALUES
                ('$username','$email','$password','$phone','$capital','$lat','$long');";
```

Figure 5:php register

Screen for adding new product in data base:

id	date	user_email	product_name	type	description	price	capital	photo_url	phone
40	2018-06-25 16:16:26	ahmed@yahoo.com	shose	Others	new white shoes for men for exchange with gray one...	250	Sharqia	https://programmerx.000webhostapp.com/ExchangeMe/i...	012273907
41	2018-06-25 22:03:59	bassam@yahoo.com	scoter	Cars	scoter for exchanging with anew one	5555	Sharqia	https://programmerx.000webhostapp.com/ExchangeMe/i...	012864125

Figure 6: adding product

Php script for adding new product:

```
if($_SERVER['REQUEST_METHOD']=='POST'){

    //checking the required parameters from the request
    if(isset($_POST['Product_name'])and isset($_POST['Product_price']) and isset($_POST['Product_disc']) and
        isset($_POST['Product_phone']) and isset($_POST['user_email']) and isset($_FILES['image']['name'])){

        //getting name from the request
        $user_email = $_POST['user_email'];

        $Product_name = $_POST['Product_name'];

        $Product_price = $_POST['Product_price'];

        $Product_disc = $_POST['Product_disc'];

        $Product_phone = $_POST['Product_phone'];

        $Product_dep = $_POST['Product_dep'];

        $Product_capital = $_POST['Product_capital'];

        //getting file info from the request
        $fileinfo = pathinfo($_FILES['image']['name']);

        //getting the file extension
        $extension = $fileinfo['extension'];
```

Figure 7: simple code of adding php

4.3: Front-end sub-system

Welcome to Badlny application we are as happy as you downloaded it,

After installed our application you will find welcome screen "Badlny".

4.3.1: Welcome screen

Figure 8: welcome screen

When the user clicks the icon launcher of the application the welcome screen will appear for few seconds then disappear and the login screen will appear instead.

4.3.2: Login Diagram

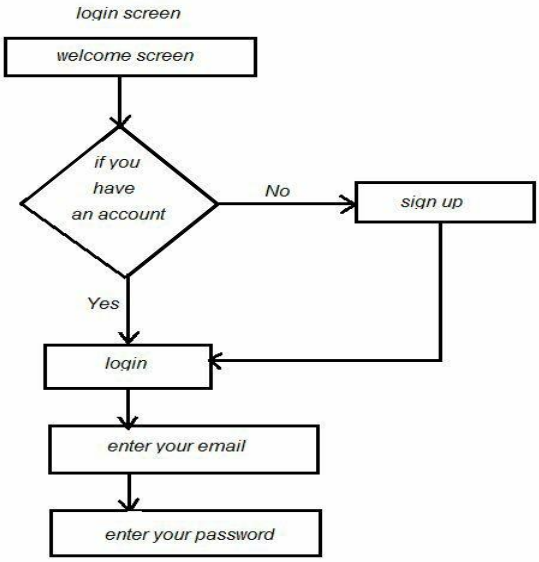

Figure 9:login diagram

In this diagram we show that when you launch the application you will find welcome screen if you have account you will login if not you must register firstly then login by user name and password.

How to login to our project?

Figure 10:login screen

Methodology:

Where the user will enter his personal information needed to run the application in the way that is design.

The required information:

- E-mail address
- Password

Simple code of login screen

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate( savedInstanceState );
    setContentView( R.layout.activity_login );
    email = (EditText)findViewById( R.id.email );
    password = (EditText)findViewById( R.id.pass );
    login = (Button)findViewById( R.id.login );
    signup= (TextView)findViewById( R.id.sign_up_text );
    signup.setOnClickListener( new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            startActivity( new Intent( packageContext: Login.this,Register.class ) );
        }
    } );
    login.setOnClickListener( new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            get_email = email.getText().toString();
            get_pass = password.getText().toString();
            login_Now(get_email, get_pass);
        }
    } );
}
```


Figure 11:login code

4.3.3: Registration Diagram

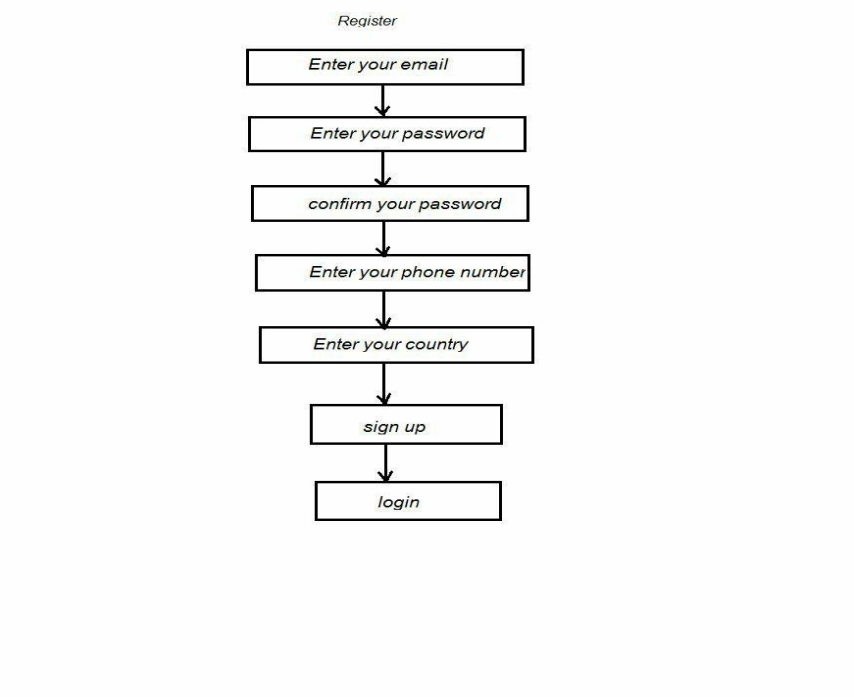

Figure 12:registration diagram

In this diagram we show how you can register new account in application if this is the first time in the app.

How to sign up to our project?

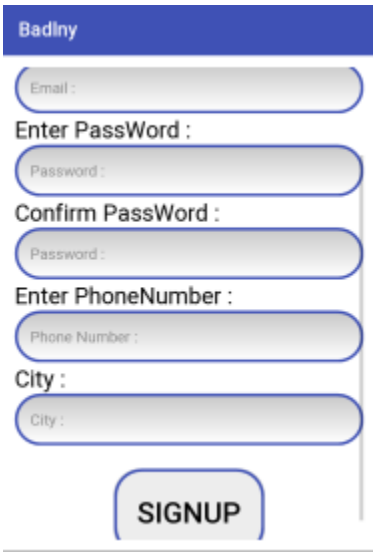

Figure 13:sign up screen

Methodology:

If it was the first time to use the application you have to create a new account by entering valid required information.

The required information:

- User name
- E-mail
- Password
- Confirm password
- Phone number
- City

Simple code of registration screen

```
S_fullNAme = et_fullNAme.getText().toString();
S_email = et_email.getText().toString();
S_passWord = et_passWord.getText().toString();
S_con = et_con.getText().toString();
S_country = et_country.getText().toString();
S_phoneNumber = et_phoneNumber.getText().toString();
if (et_email.getText().length()<=8){
    et_email.setError( "Please write a valid Email" );
    valid = false;
}
if (et_fullNAme.getText().length()<=2){
    et_fullNAme.setError( "Please write a valid Name" );
    valid = false;
}

if (S_passWord.equals( S_con ) && S_passWord.length()>=6) {
    if (S_email.isEmpty()){
        et_email.setError( "Please Fill Email" );
    }else {
        if (valid){
            //Toast.makeText(Register.this,"Invalid email address",Toast.LENGTH_SHOR
            et_email.setError( "Invalid email address" );
```


Figure 14:registration code

After your registration in the application you are become in the home page.

4.3.4: Home Diagram

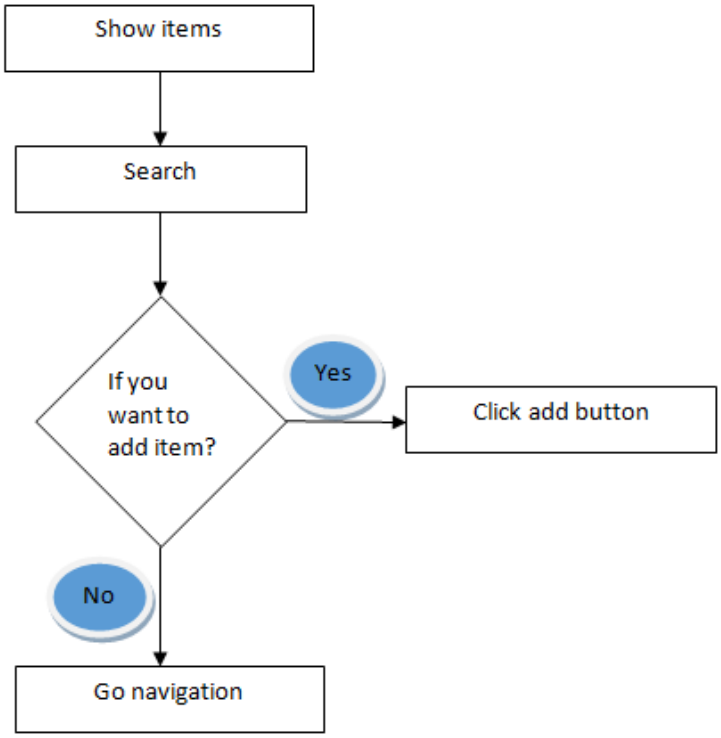

Figure 15:Home digram

Discover and search Home

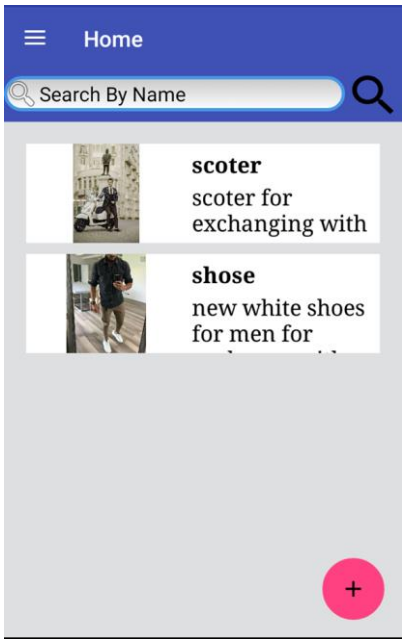

Figure 16:Home screen

Methodology:

After log screen you will move to the next screen in the application "Home screen".

At the top of the home screen you will find search bar where you can search for a specific item by its title.

Instead of writing the item title at the search bar you can select it directly by clicking its title in the page.

Simple code for home screen

```
@Nullable
@Override
public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container,
    View view = inflater.inflate( R.layout.home,container, attachToRoot: false );
    search = view.findViewById( R.id.search_home );
    readBundle(getArguments());
    //getActivity().getActionBar().setTitle("Home");
    search_field = view.findViewById( R.id.home_search_filed );
    recyclerView = (RecyclerView) view.findViewById(R.id.home_rec);
    recyclerView.setHasFixedSize(true);
    recyclerView.setLayoutManager(new LinearLayoutManager(getActivity()));
    return view;
}

@Override
public void onResume() {
    super.onResume();
    ((Switch_Nav) getActivity())
            .setActionBarTitle("Home");
}
```

Figure 17:Home code

4.3.5: The diagram of adding new item

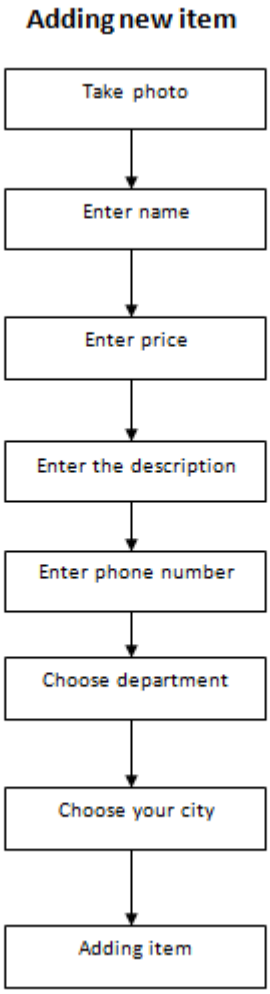

Figure 18:Adding item diagram

In this diagram we show how you can add new product in the application.

Adding item screen

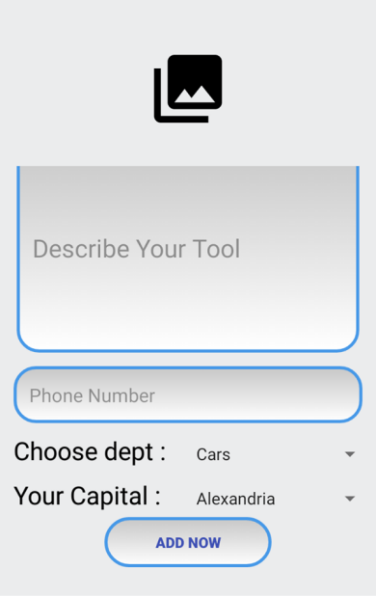

Figure 19: Adding item screen

Methodology:

If you want to add new item you must enter valid required information.

The Required information:

- Item image
- Name
- Price
- Description
- Phone
- Department
- City

Simple code for adding item

```
protected void onCreate(@Nullable Bundle savedInstanceState) {
    super.onCreate( savedInstanceState );
    setContentView( R.layout.add_item );
    //Requesting storage permission
    requestStoragePermission();
    name = (EditText)findViewById( R.id.et_tool_name );
    phone = (EditText)findViewById( R.id.et_tool_phone );
    price = (EditText)findViewById( R.id.et_tool_price );
    description = (EditText)findViewById( R.id.et_tool_describe );
    image = (ImageView)findViewById( R.id.image1_tool );
    dep = (Spinner)findViewById( R.id.spinner_dept );
    cap = (Spinner)findViewById( R.id.spinner_cap );
    send = (Button)findViewById( R.id.btn_ADD_Tool );

    intent = getIntent();

    get_email = intent.getStringExtra( name: "email" );


    byteArrayOutputStream = new ByteArrayOutputStream();

    image.setOnClickListener((view) → {

            Intent intent = new Intent();
```

Figure 20:adding item code

4.3.6: navigation bar screen

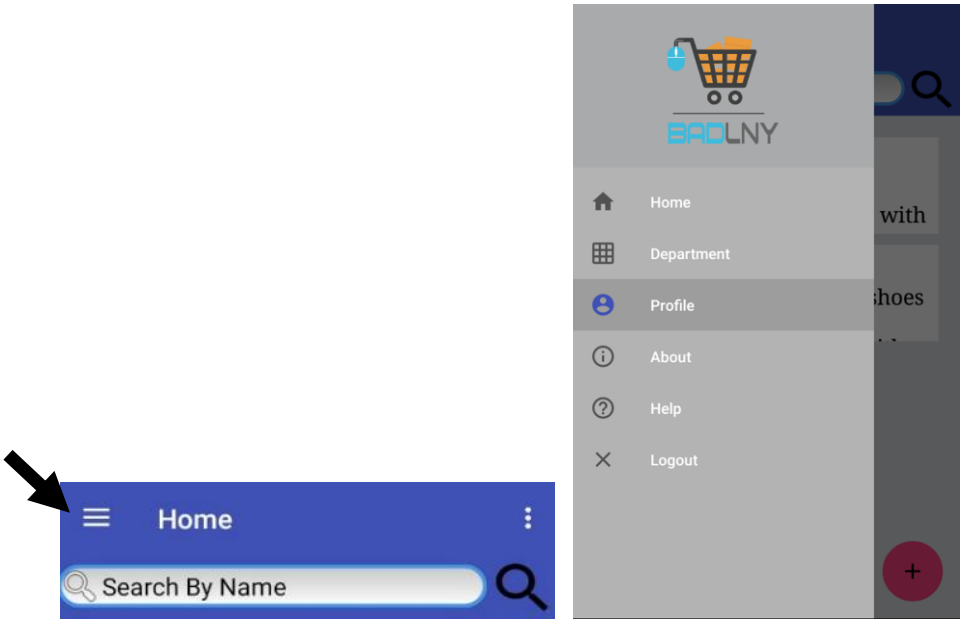

Figure 21: navigation bar

In this screen you can easily access the following:

1-home

Where you find all products and new one.

2-department

Where you find all departments in activity.

3-profile

Where you find personal information and your products and delete the sold others.

4-about

Where find a short abstract about the project and evaluate it.

5-help

Where you find how to deal with the project.

4.3.7: Department screen

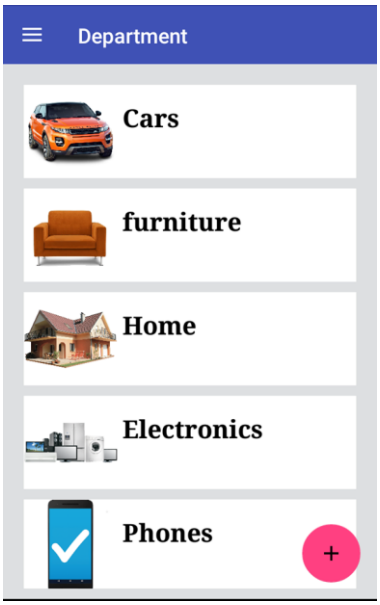

Figure 22: Department screen

Methodology:

In this page you are found all the department detail that you will find in the application like car furniture home electronics phones others and in each department, you will find all products that will find in it and choose what you need and search for this.

Simple code for department

```
private void LoadRecyclerViewData() {
    final ProgressDialog progressDialog = new ProgressDialog(getActivity());
    progressDialog.setMessage("Loading Data ...");
    progressDialog.show();

    department_items = chargeData(department_items);

    adapter = new Department_Adapter(department_items,getActivity());
    recyclerView.setAdapter(adapter);
    progressDialog.dismiss();
}

private List<Department_item> chargeData(List<Department_item> s){
    s = new ArrayList<>();
    Department_item i = new Department_item( R.mipmap.car, name: "Cars" );
    s.add( i );
    i = new Department_item( R.mipmap.fur, name: "furniture" );
    s.add( i );
    i = new Department_item( R.mipmap.home, name: "Home" );
    s.add( i );
    i = new Department_item( R.mipmap.electro, name: "Electronics" );
    s.add( i );
```

Figure 23:departement code

4.3.8: The Profile diagram

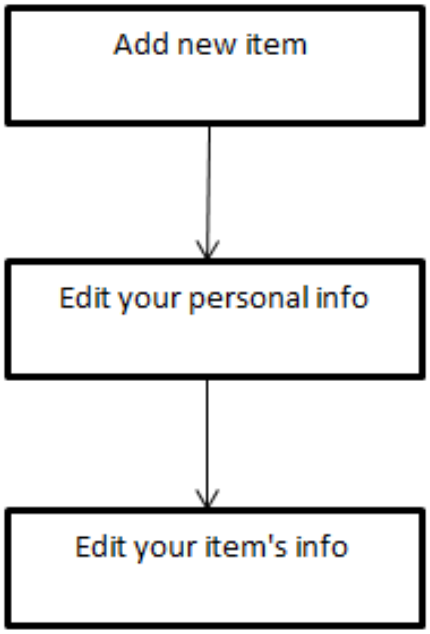

Figure 24:profile diagram

In this diagram we show what you can find in profile page
in this page you will find all personal information and list of all products you sharing it in the application and the sold one you can delete it.

Profile screen

Figure 25: profile screen

Methodology:

After you register for the first time you are become have a profile page that you will find on it name email phone and city and all products that you are added it in the application and if anyone from your products are sold or the deal is done you can delete it from your profile page

Simple code for profile

```
final ProgressDialog progressDialog = new ProgressDialog(getActivity());
progressDialog.setMessage("Loading Data ...");
progressDialog.show();
StringRequest stringRequest = new StringRequest( Request.Method.POST,  url: "https://pro
        new Response.Listener<String>() {
            @Override
            public void onResponse(String response) {
                try {
                    String s = URLEncoder.encode(response, enc: "ISO-8859-1");
                    response = URLDecoder.decode(s, enc: "UTF-8");
                }catch (UnsupportedEncodingException e){
                    e.printStackTrace();
                }
                progressDialog.dismiss();
                try {
                    JSONObject jsonObject = new JSONObject(response);
                    JSONArray jsonArray = jsonObject.getJSONArray( name: "user_data");
                    for (int i=0; i<jsonArray.length(); i++){
                        JSONObject object = jsonArray.getJSONObject(i);
                                email.setText(object.getString( name: "email"));
                                name.setText(object.getString( name: "user_name"));
                                phone.setText(object.getString( name: "phone"));
                                cap.setText(object.getString( name: "capital"));
```

Figure 26:profile code

4.3.9: About screen

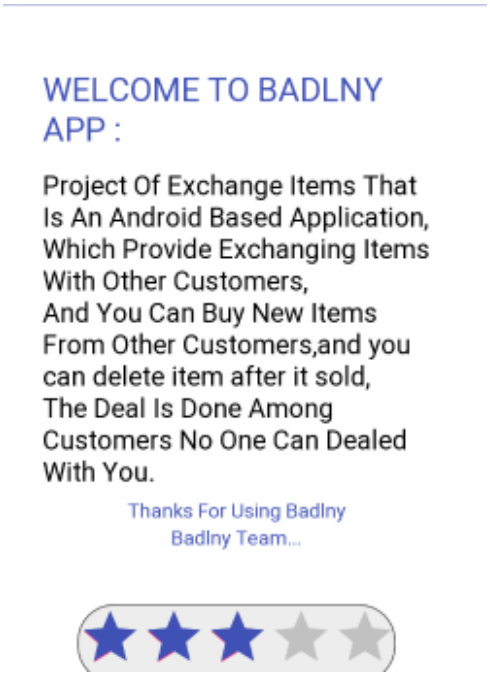

Figure 27: about screen

In about screen you will find a short abstract about the application and ratting application.

4.3.10: Help screen

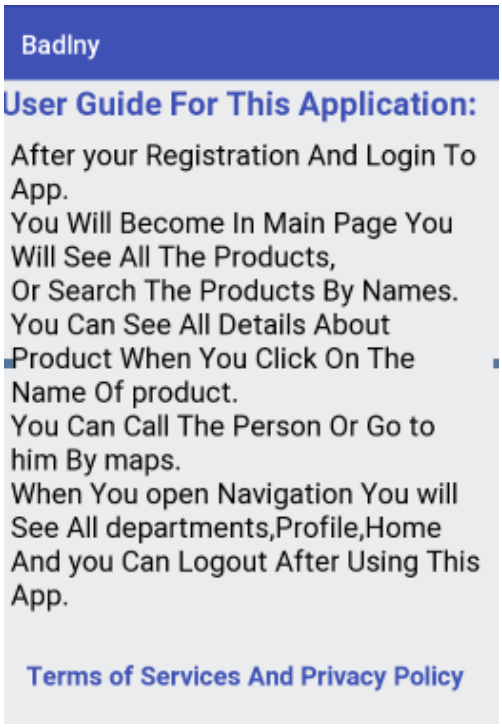

Figure 28: help screen

In help screen you will find the user guide for how to deal with application.

Chapter 5:

Conclusion and future work

5.1: Conclusion:

Smart phones that supported android or other operating system can be used to develop a lot of useful applications that serves the user in his daily life activities.

Till know we reached the mobile application to add product and scan it for exchange or sell it to get best offer between customers.

Most people don't have time to go shopping or search for some product for exchanging with other product instead of get rid of them.

There is no doubt that most people have many things that doesn't need it We want to help people instead of get rid of the products that they didn't need it, try to find and exchanging product with useful product that they need it.

5.2: Future work:

1. Work on more creative design and apply rating on the services.
2. Control edit in personal and product information.
3. Work on notification betweenall customers.
4. Adding an evaluating specialist in each department.
5. Send feedbackfor updating and development.

5.3: References

Websites:

Http://www.developer.android.com/
Http://www.stackoverflow.com/

Http://developer.google.com/maps/documentation/

Http://www.ooowebhost.com/

Books:

Professional Android application development, retoMeier (book)

Head First Android Development: A Brain-Friendly Guide

Articles:

Https://www.engadget.com/tag/android/

Http://www.hendiware.com/android-webservices-بالعربية-volley/

ولم يكن هذا بالجهد القليل ولا نستطيع أن ندعي فيه الكمال

ولكن لنا عذرنا اننا بذلنا فيه عصره جهدنا

وفي النهاية مانحن الا بشر

والبشر قد يخطئون وقد يصيبون

فان وفقنا الله في اصابه ما هدفنا إليه، فلان ذلك هدفنا وان اخطانا فلقد نلنا شرف المحاولة والتعليم

نامل من الله ان ينال قبولكم