The Business Network

Submitted By

Rafat Saleheen

ID: 2012-2-60-007

Supervised By

Dr. Md. Nawab Yousuf Ali

Associate Professor

Department of Computer Science and Engineering

East West University, Dhaka, Bangladesh



Department of Computer Science and Engineering

East West University

Fall 2016

The Business Network

By

Rafat Saleheen

ID: 2012-2-60-007

The Project has been submitted to the department of computer Science and Engineering, East West University in the fulfillment of the requirement for the degree of Bachelor of Science in Computer Science and Engineering.



EAST WEST UNIVERSITY
Summer 2016

DECLARATION

The project has been submitted to the Department of the Computer Science and Engineering, East West University in the fulfillment of the requirement for the degree of Bachelor of Science in CSE performed by us under supervision of Associate ProfessorDr. Md. Nawab Yousuf Ali, Dept. of CSE at East West University. This is also needed to certify that, the project work under the course' **Project Work (CSE-497)'.** We, here by, declare that this project has not been submitted elsewhere for the requirement of any degree or diploma or any other purposes.

Signature of th	ie candidate
-----------------	--------------

Rafat Saleheen

2012-2-60-007

Letter of Acceptance

The Project entitled "**The Business Network**" submitted by Rafat Saleheen, ID:2012-2-60-007 to the department of computer Science and Engineering, East West University, Dhaka, Bangladesh is accepted satisfactory for this fulfillment of the requirement for the degree of Bachelor of Science in Computer Science and Engineering December 10,2016.

Board of Examiners				
Project Supervisor				
Dr. Md. Nawab Yousuf Ali				
Associate Professor				
Department of Computer Science & Engineering				
East West University, Dhaka, Bangladesh				
Chairperson				
Dr. Mozammel Huq Azad Khan				
Professor & Chairperson				
Department of Computer Science & Engineering				
East West University, Dhaka, Bangladesh				

Acknowledgement

First of all,I would like to convey my thanks and gratitude to Almighty Allah, for his immeasurable grace and profound kindness, todayI am successful in completing our works.

I am heartily grateful to my supervisor Dr. Md. Nawab Yousuf Ali, Department of Computer Science & Engineering, East West University for his continuous support and inspiration and also thankful for his kindness to complete proper report.

I am also thankful to the teachers and faculty members of Computer Science & Engineering Department of, East West University for their valuable advice.

Abstract

In this project, I developedawebsite and android application that is very useful for all the people in the commercial world. All types of recruitment, trading, transportation and other business news can be published here which is a one stop solution for all. People can choosetheir suitable deals from here and get benefited. The business network provides information to the public about the business rather than transacting business like e- commerce or others. The business network is a type of business social network which is developed to help businesspeople connect with other managers and entrepreneurs to further each other's business interests by forming mutually beneficial business relationships. Business networking can be conducted in a local business community, at a regional level or even at a national level or international level, in the form of conferences and other fora.

TABLE CONTENTS

Title		Page No
Decla	ration	i
Lette	r of Acceptance	ii
Ackno	owledgements	iii
Abstr	act	iv
List o	f all Figures	vii
1.	INTORDUCTION	1
1.1	Motivation	1
1.2	Purpose of the project	1
1.3	Outline	1
2.	THE SYSTEM	2
2.1	User Activities	2
2.2	Admin Activities	2
3.	REQUIREMENT ANALYSIS	3-9
3.1	Data Requirements	3
3.2	Physical Design	3
3.3	Use Case Diagrams	4
3.3.1	Use Case Diagram for Unregistered User	4
3.3.2	Use Case Diagram for Registered User	5
3.3.3	Use Case Diagrams for Admin	6
3.3.4	Use Case Diagram for User from Mobile Platform	7

3.4	Software Requirements	8
3.4.1	HTML	8
3.4.2	CSS	8
3.4.3	Wordpress	8
3.4.4	Apache Server(XAMPP)	9
3.4.5	MySQL	9
3.4.6	Android Studio	9
4.	DESIGN SPECIFICATION	10-18
4.1	Interface	10
4.2	User Interface - Web	10
4.2.1	Home Page	10-11
4.2.2	Post Page	12
4.2.3	Forum Page	13
4.3	User Interface - Android	14
5.	CONCLUSION AND FUTURE WORK	15
	REFERENCE	16
	APPENDIX	17-30

List of Figures

Figure 3.1: Use Case Diagram for Unregistered User Management	4
Figure 3.2: Use Case Diagram for Registered User Management	5
Figure 3.3: Use Case Diagram for Admin	6
Figure 3.4: Use Case Diagram for Users from Mobile Platform	7
Figure 4.1: Upper Part of Home Page	10
Figure 4.2: Lower Part of Home Page	11
Figure 4.3: Individual Sections for Forum, Categories, Login and Search	11
Figure 4.4: Individual Section for Posts, Author and Reply	12
Figure 4.5: Forum Page	13
Figure 4.6: Section for Comment	13
Figure 4.7: Individual Sections for Recent Posts, Categories and Authors	14

Introduction

The business network is differing from electronic commerce, portal, or sites in that they provide information to the public about the company rather than transacting business or providing other services. The phrase is a term of art referring to the purpose of the site rather than its design or specific features, or the nature, market sector, or business structure of the site operator.

1.1 Motivation

For my project I consider to develop this website for these reasons.

- 1. This can be a one stop solution for all types of people in corporate world.
- 2. There are no good business networking websites that will provide all information of corporate world.
- 3. Billions of dollars' accessories get wasted every year and millions of dollars get wasted at trading and transportation just because of lack of communication. To prevent these, the business network stands for.

1.2 Purpose of the project

To Change the concept of business networking system that exists. Giving one stop solution for all types of people in corporate world. Admin can keep update to date through admin panel.

1.3 Outline

- ➤ Introduction: is discussed in Chapter 1.
- ➤ The System: is discussed in Chapter 2.
- Requirement Analysis: is discussed in Chapter 3.
- Design Specification: is discussed in Chapter 4.
- ➤ Code Specification: is discussed in Appendix.
- ➤ Conclusion and Future Work: is discussed in Chapter 5.

The System

The system describes the activities of users and admin.

2.1 User Activities

There are two kind of user of this system.

- 1. User who have an account.
- 2. User who does not have an account.

User who have an account:

- 1. They can view the posts.
- 2. They can view the forums.
- 3. They can view the pages.
- 4. They can log in and update their profiles.
- 5. They can create, update and delete posts.
- 6. They can comment on posts.
- 7. They can comment on forums.

User who don't have an account:

- 1. They can view the posts.
- 2. They can view the pages.
- 3. They can view the forums.
- 4. They can comment on posts.
- 5. They can comment on forums.
- 6. They can apply to register.

2.2 Admin Activities

For admin there are different task where

- 1. Admin can log in.
- 2. Create, update and delete users.
- 3. Create, update and delete posts and pages.
- 4. Create, update and delete categories.
- 5. Create, update and delete forums.
- 6. Edit website's view and orientation.

Requirements Analysis

The website required the following requirement. There are mainly three actors such as registered user, unregistered user and admin.

3.1 Data Requirement

During the requirement analysis the following data have been identified as data requirement.

- Firstly, the unregistered user can view the home and choose the pages, posts, forums.
- Then user can find news form archives and categories.
- If the users want to comment on a post or forum, he/she can do this.
- The user can apply to register.
- Registered user logged in.
- Logged in users can create, update and delete posts.
- Logged in users can update their profiles.
- Registered user can view the home and choose the pages, posts, forums.
- The user can find news form archives and categories.
- The user can comment on a post or forum.
- Admin can login to the admin panel to manage the website.
- He can create, update and delete posts.
- He can create, update and delete pages.
- He can create, update and delete categories.
- He can create, update and delete forums.
- He can create, update and delete users.
- From android platform, user can view the website, recent posts, categories and authors.

3.2 Physical Design

The physical design relates to the actual input and output processes of the system. This is laid down in terms of how data is input into a system, how it is verified or authenticated, how it is processed and how it is displayed as in Physical design; the following requirements about the system are decided.

- Input requirements
- Output requirements
- Storage requirements
- Processing requirements

3.3 Use Case Diagrams

A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well.

3.3.1 Use Case diagram for unregistered user

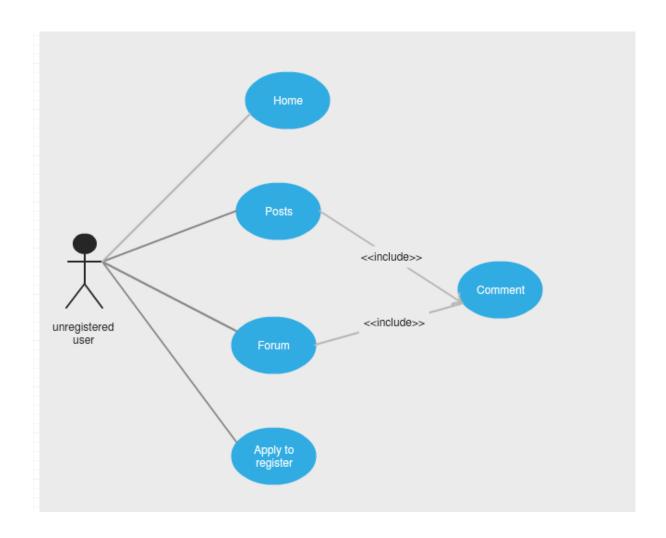


Figure 3.1: Use Case Diagram for Unregistered User Management

Description: This is the use case diagram of an unregistered user. This diagram shows the interaction between unregistered user and the site.

❖ Home: Unregistered users can go to home page and can see all contents of the homepage.

- ❖ Posts: Unregistered users can view the posts and comment on posts.
- **Forum:** Unregistered users can view the forums and comment on.
- ❖ **Apply to Register:** Unregistered users can apply to admin to register.

3.3.2 Use Case diagram for registered user

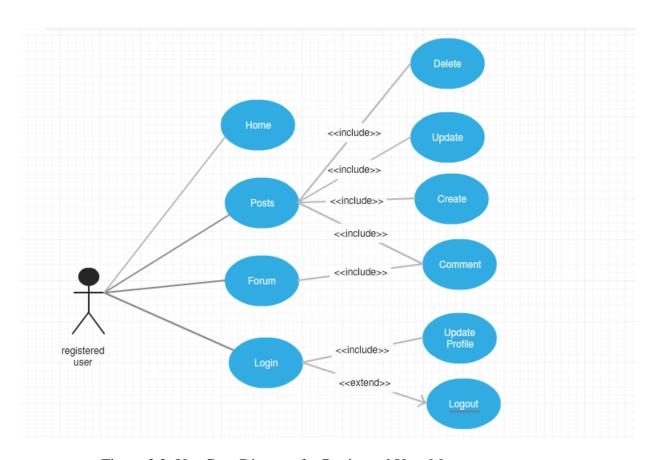


Figure 3.2: Use Case Diagram for Registered User Management

Description: This is the use case diagram of a registered user. This diagram shows the interaction between registered user and the site.

- **❖ Home:** Registered users can go to home page and can see all contents of the homepage.
- ❖ Posts: Registered users can view the posts, create new post, update posts, delete own posts and comment on posts.
- **Forum:** Registered users can view the forums and comment on.
- ❖ Login: Registered users can login to the site, modify posts, update profile and logout.

3.3.3 Use Case diagram for admin

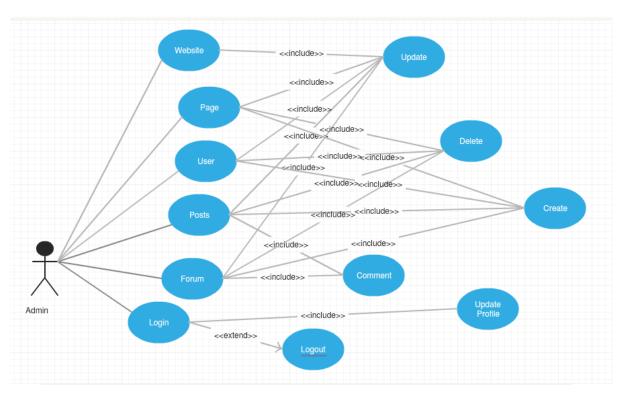


Figure 3.3: Use Case Diagram for Admin

Description: This is the use case diagram of a admin. This diagram shows the interaction between admin and the site.

- **Website:** Admin can update the website.
- ❖ Posts: Admin can create new post, update posts, delete posts and comment on posts.
- ❖ Pages: Admin can create new page, update pages, delete pages.
- **Forums:** Admin create new forum, update forums, delete forums.
- **Users:** Admin can create new user, update user profile and delete user.
- **Login:** Admin can login to the site, modify posts, update profile and logout.

3.3.4 Use Case diagram for users from mobile platform

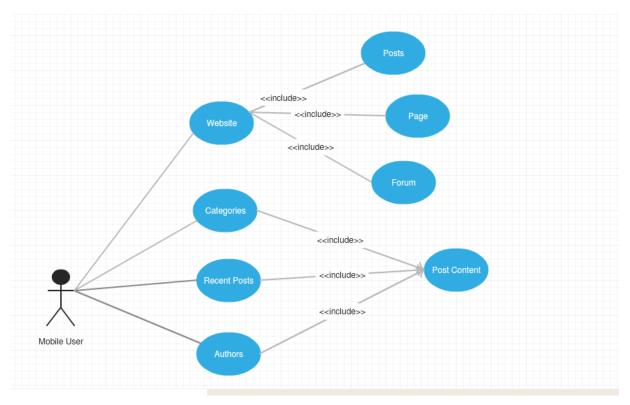


Figure 3.4: Use Case Diagram for Users from Mobile Platform

Description: This is the use case diagram of a user from mobile platform. This diagram shows the interaction between user from mobile platform and the site.

- ❖ Website: User from mobile platform can view the website in original look; can view posts, pages, forums and comment on.
- **Categories:** User from mobile platform can view post from categories list.
- **Recent Posts:** User from mobile platform can view recent posts in list.
- ❖ Authors: User from mobile platform can view post from authors list.

3.4 Software Requirements

To implement this web application any technologies that are used are open sources. We are discussing about them below.

3.4.1 HTML

Html is a markup language for describing the web documents. Every web page you see on the Internet, including this one contains HTML code that helps format and show text and images in an easy to read format. Without HTML a browser would not know how to format a page and would only display plain text with no formatting that contained no links.

3.4.2 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

3.4.3 WordPress

WordPress is a free and open-source content management system (CMS) based on PHP and MySQL. WordPress is installed on a web server, which either is part of an Internet hosting service or is a network host itself; the first case may be on a service like WordPress.com, for example, and the second case is a computer running the software package WordPress.org. An example of the second case is a local computer configured to act as its own web server hosting WordPress for single-user testing or learning purposes.

3.4.4 Apache Server (XAMPP)

The Apache HTTP Serve, commonly referred to as Apache is a web Server application notable for playing a key role in the initial growth of the World Wide Web. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. Most commonly used on a Unix-like System, he software is available for a wide variety of operating systems, including Unix, FreeBSD, Linux, Solaris, Novell Net Ware, OS, Microsoft Windows, os/2, TPF, Open VMS. Released under the Apache License, Apache is open-source software.

3.4.5 MYSQL

MYSQL is an open source relational database management system (RDBMS). In July 2013, it was the world's second most widely used RDBMS, and the most widely used open sources client server RDBMS. It is named after co-founder Michael Wildenius's daughter, me. The SQL acronym stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. We used MySQL for our database management System.

3.4.6 Android Studio

Android Studio is the official integrated development environment (IDE) for Android platform development. Based on Jet Brains' IntelliJ IDEA software, Android Studio is designed specifically for Android development. It is available for download on Windows, Mac OS X and Linux, and replaced Eclipse Android Development Tools (ADT) as Google's primary IDE for native Android application development. Android Studio is freely available under the Apache License 2.0.

Design Specification

4.1 Interface

User interface design (UI) or user interface engineering is the design of user interfaces for machines and software, such as computers, home appliances, mobile devices, and other electronic devices, with the focus on maximizing usability and the user experience. The goal of user interface design is to make the user's interaction as simple and efficient as possible, in terms of accomplishing user goals (user-centered design).

4.2User Interface – Website

In Information technology, the user interface (UI) is everything designed into an information device with which a human being may interact. We design our website user friendly.

4.2.1 Home Page

In home page, anyone can view the page contents. Registered users and admin can login from here. Individual section for categories, forums, login, archives, recent posts, calendar and search.



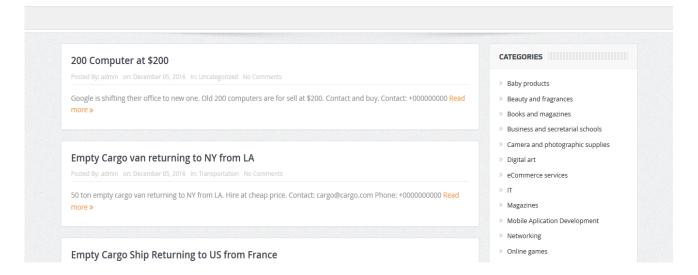


Figure 4.1: Upper Part of Home Page

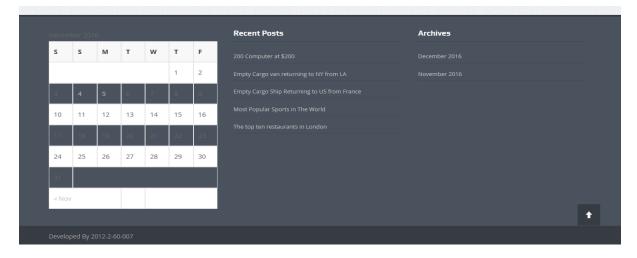


Figure 4.2: Lower Part of Home Page

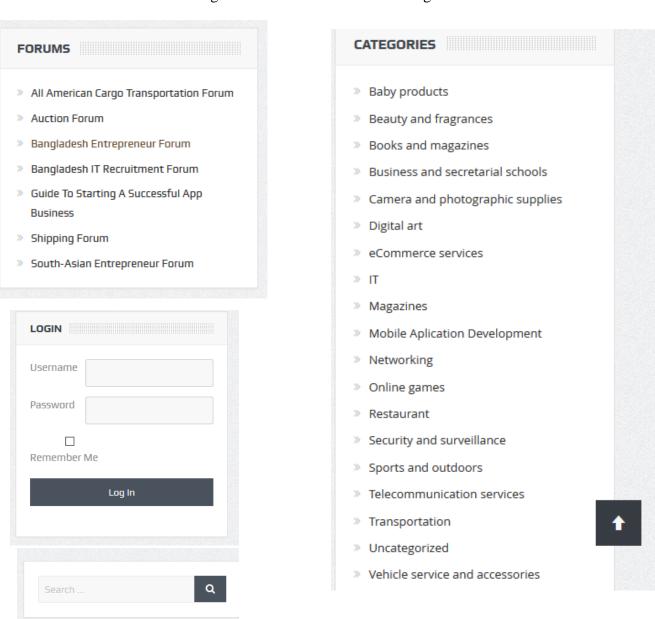


Figure 4.3: Individual Sections for Forum, Categories, Login and Search

4.2.2 Post Page

An article that contains information or links to other articles covering a specific topic is a post.

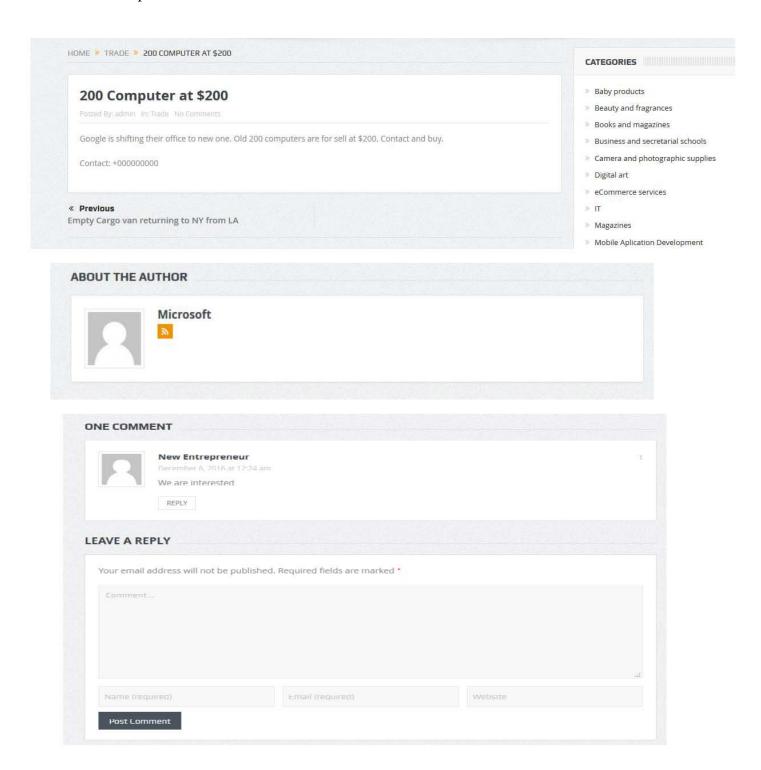


Figure 4.4: Individual Section for Posts, Author and Reply

4.2.3 Forum Page

An Internet forum, or message board, is an online discussion site where people can hold conversations in the form of posted messages. They differ from chat rooms in that messages are often longer than one line of text, and are at least temporarily archived. Also, depending on the access level of a user or the forum set-up, a posted message might need to be approved by a moderator before it becomes visible.

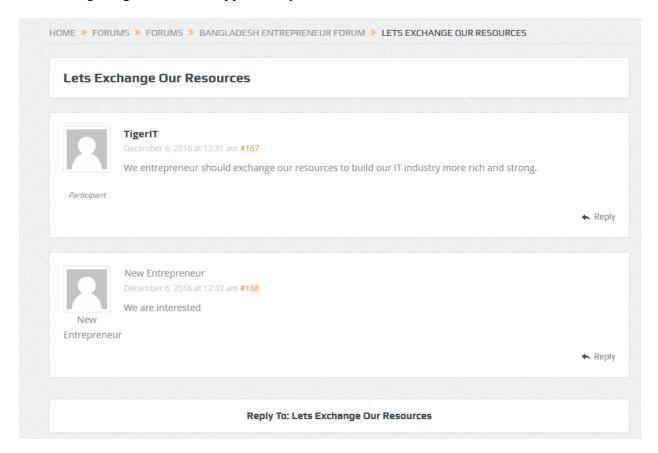


Figure 4.5: Forum Page

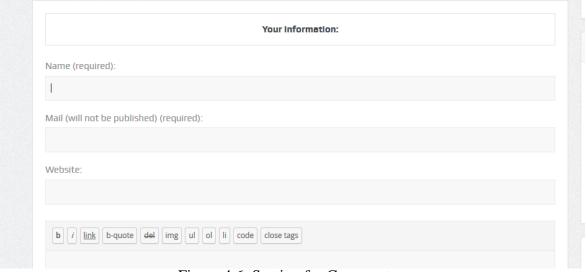
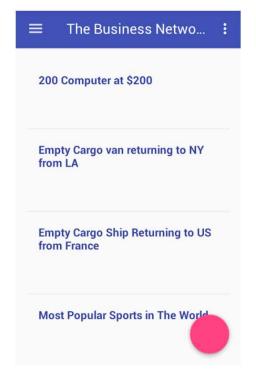
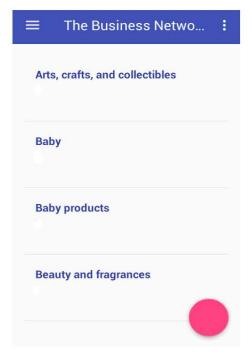


Figure 4.6: Section for Comment

4.3User Interface – Android







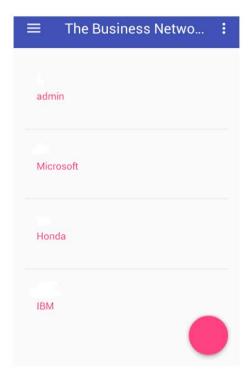


Figure 4.7: Individual Sections for Recent Posts, Categories and Authors

5.1 Conclusion and Future Work

This is the era of information and communication. If we can ensure a synchronized communication and information sharing around the world, everyone will be benefited. In the late 20th century the study of business networks emerged in the specific field of industrial markets. Researchers concentrate on questions such as "what is happening underneath the visible flows of products, enquiries, sales visits and negotiations, and beyond the visible growth and prosperity of some companies and failure of others". So the goal is to make a synchronized networking system open for everyone.

The future plan of this project is to improved design, implementation and documentation. In future I will create a total network for everyone where everyone can communicate with other so easily.

REFERENCE

- 1. https://developer.android.com/
- 2. http://stackoverflow.com/
- 3. https://www.udacity.com/
- 4. https://guides.codepath.com/android
- 5. http://www.lynda.com/
- 6. http://www.androidhive.info/
- 7. http://www.w3schools.com/
- 8. http://www.tutorialspoint.com/
- 9. https://learn.wordpress.com/
- 10. http://www.wpbeginner.com/category/wp-tutorials/
- 11. http://en.wikipedia.org/wiki/

APPENDIX

Code- Android

//MainActivity.Java

```
package com.ewu.saleheen.businessnetwork;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
import android.util.Log;
import android.view.View;
import android.support.design.widget.NavigationView;
import android.support.v4.view.GravityCompat;
import android.support.v4.widget.DrawerLayout;
import android.support.v7.app.ActionBarDrawerToggle;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.AdapterView;
import android.widget.ListAdapter;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import android.widget.Toast;
import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;
import java.util.ArrayList;
import java.util.HashMap;
public class MainActivityextends AppCompatActivity
implements NavigationView.OnNavigationItemSelectedListener {
private String TAG = MainActivity.class.getSimpleName();
private ProgressDialogpDialog;
private ListViewlistview;
private static String url= "http://www....com/api/get_recent_posts/";
ArrayList<HashMap<String, String>>postsList;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity main);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
setSupportActionBar(toolbar);
postsList= new ArrayList<>();
listview= (ListView) findViewById(R.id.list);
new GetContacts().execute();
FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
fab.setOnClickListener(new View.OnClickListener() {
```

```
@Override
public void onClick(View view) {
                Intent intent= new Intent(MainActivity.this, WebActivity.class);
startActivity(intent);
        });
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
ActionBarDrawerToggle toggle = new ActionBarDrawerToggle(
this, drawer, toolbar, R.string.navigation_drawer_open,
R.string.navigation drawer close);
drawer.setDrawerListener(toggle);
toggle.syncState();
NavigationViewnavigationView = (NavigationView) findViewById(R.id.nav view);
navigationView.setNavigationItemSelectedListener(this);
@Override
public void onBackPressed() {
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
if (drawer.isDrawerOpen(GravityCompat.START)) {
drawer.closeDrawer(GravityCompat.START);
       } else {
super.onBackPressed();
       }
    }
@Override
public booleanonCreateOptionsMenu (Menu menu) {
getMenuInflater().inflate(R.menu.main, menu);
return true;
    }
public booleanonOptionsItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.action settings) {
return true;
       }
return super.onOptionsItemSelected(item);
@SuppressWarnings("StatementWithEmptyBody")
@Override
public booleanonNavigationItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.nav_post) {
        } else if (id == R.id.nav category) {
           Intent intent= new Intent(MainActivity.this, CategoryActivity.class);
startActivity(intent);
        } else if (id == R.id.nav_author) {
            Intent intent= new Intent(MainActivity.this, AuthorActivity.class);
startActivity(intent);
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
drawer.closeDrawer(GravityCompat.START);
return true;
   }
```

```
private class GetContactsextends AsyncTask<Void, Void, Void> {
@Override
protected void onPreExecute() {
super.onPreExecute();
pDialog= new ProgressDialog(MainActivity.this);
pDialog.setMessage("Please wait...");
pDialog.setCancelable(false);
pDialog.show();
@Override
protected Void doInBackground(Void... arg0) {
JSONParsingsh = new JSONParsing();
String jsonStr = sh.makeServiceCall(url);
        Log.e(TAG, "Response from url: " + jsonStr);
if (jsonStr != null) {
try {
JSONObjectjsonObj = new JSONObject(jsonStr);
JSONArray posts = jsonObj.getJSONArray("posts");
for (inti = 0; i<posts.length(); i++) {</pre>
                 JSONObject p = posts.getJSONObject(i);
                        String id = p.getString("id");
                        String type = p.getString("type");
                        String url = p.getString("url");;
                        String title = p.getString("title");
                        String content = p.getString("content");
HashMap<String, String> contact = new HashMap<>();
contact.put("id", id);
contact.put("type", type);
contact.put("url", url);
contact.put("title", title);
contact.put("content", content);
postsList.add(contact);
catch (final JSONException e) {
Log.e(TAG, "Json parsing error: " + e.getMessage());
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Json parsing error: " + e.getMessage(),
Toast. LENGTH LONG)
                                     .show();
                       }
                    });
                }
```

```
else {
Log.e(TAG, "Couldn't get json from server.");
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Couldn't get json from server. Check LogCat for possible errors!",
Toast. LENGTH_LONG)
                                .show();
               });
return null;
   }
@Override
protected void onPostExecute(Void result) {
super.onPostExecute(result);
if (pDialog.isShowing())
pDialog.dismiss();
ListAdapter adapter = new SimpleAdapter(
MainActivity.this, postsList, R.layout.list_item, new String[]{"title"}, new
int[]{R.id.title});
listview.setAdapter(adapter);
        }
    }
}
```

```
//JSONParsing.Java
```

```
package com.ewu.saleheen.businessnetwork;
import android.util.Log;
import java.io.BufferedInputStream;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStream;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.MalformedURLException;
import java.net.ProtocolException;
import java.net.URL;
public class JSONParsing {
private static final String TAG = JSONParsing.class.getSimpleName();
public JSONParsing() {
   }
public String makeServiceCall(String reqUrl) {
       String response = null;
try {
            URL url = new URL(reqUrl);
HttpURLConnection conn = (HttpURLConnection) url.openConnection();
conn.setRequestMethod("GET");
InputStream in = new BufferedInputStream(conn.getInputStream());
           response = convertStreamToString(in);
        } catch (MalformedURLException e) {
Log.e(TAG, "MalformedURLException: " + e.getMessage());
       } catch (ProtocolException e) {
Log.e(TAG, "ProtocolException: " + e.getMessage());
        } catch (IOException e) {
Log.e(TAG, "IOException: " + e.getMessage());
        } catch (Exception e) {
Log.e(TAG, "Exception: " + e.getMessage());
       }
return response;
   }
private String convertStreamToString(InputStream is) {
BufferedReader reader = new BufferedReader(new InputStreamReader(is));
StringBuildersb = new StringBuilder();
        String line;
try {
while ((line = reader.readLine()) != null) {
sb.append(line).append('\n');
        } catch (IOException e) {
e.printStackTrace();
        } finally {
try {
is.close();
            } catch (IOException e) {
e.printStackTrace();
return sb.toString();
   }
}
```

```
//WebActivity.Java
package com.ewu.saleheen.businessnetwork;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.webkit.WebSettings;
import android.webkit.WebView;
import android.webkit.WebViewClient;
import android.widget.ProgressBar;
public class WebActivityextends AppCompatActivity {
private WebViewwebview;
private ProgressBarspinner;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity web);
this.webview= (WebView) findViewById(R.id.webview);
WebSettings settings= webview.getSettings();
settings.setJavaScriptEnabled(true);
spinner= (ProgressBar) findViewById(R.id.progressBar);
webview.setWebViewClient(new WebViewClient() {
public booleanshouldOverrideUrlLoading(WebView view, String url) {
spinner.setVisibility(View.VISIBLE);
view.loadUrl(url);
return true;
public void onPageFinished(WebView view, String url) {
spinner.setVisibility(View.INVISIBLE);
        });
webview.loadUrl("http://www....com/");
   }
```

```
//CategoreyActivity.Java
package com.ewu.saleheen.businessnetwork;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
import android.util.Log;
import android.view.View;
import android.support.design.widget.NavigationView;
import android.support.v4.view.GravityCompat;
import android.support.v4.widget.DrawerLayout;
import android.support.v7.app.ActionBarDrawerToggle;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.AdapterView;
import android.widget.ListAdapter;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import android.widget.Toast;
import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;
import java.util.ArrayList;
import java.util.HashMap;
public class CategoryActivityextends AppCompatActivity
implements NavigationView.OnNavigationItemSelectedListener {
private String TAG = CategoryActivity.class.getSimpleName();
private ProgressDialogpDialog;
private ListViewlistview;
private static String url= "http://www.....com/api/get category index/";
ArrayList<HashMap<String, String>>CategoryList;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_category);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
setSupportActionBar(toolbar);
CategoryList= new ArrayList<>();
listview= (ListView) findViewById(R.id.list);
new GetContacts().execute();
FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
fab.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
                Intent intent= new Intent(CategoryActivity.this,
WebActivity.class);
startActivity(intent);
        });
```

DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);

```
ActionBarDrawerToggle toggle = new ActionBarDrawerToggle(
this, drawer, toolbar, R. string. navigation drawer open,
R.string.navigation drawer close);
drawer.setDrawerListener(toggle);
toggle.syncState();
NavigationViewnavigationView = (NavigationView) findViewById(R.id.nav view);
navigationView.setNavigationItemSelectedListener(this);
   }
@Override
public void onBackPressed() {
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
if (drawer.isDrawerOpen(GravityCompat.START)) {
drawer.closeDrawer(GravityCompat.START);
        } else {
super.onBackPressed();
        }
@Override
public booleanonCreateOptionsMenu (Menu menu) {
getMenuInflater().inflate(R.menu.category, menu);
return true;
    }
@Override
public booleanonOptionsItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.action settings) {
return true;
        }
return super.onOptionsItemSelected(item);
   }
@SuppressWarnings("StatementWithEmptyBody")
@Override
public booleanonNavigationItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.nav_post) {
            Intent intent = new Intent(CategoryActivity.this, MainActivity.class);
startActivity(intent);
        } else if (id == R.id.nav category) {
        } else if (id == R.id.nav_author) {
           Intent intent= new Intent(CategoryActivity.this, AuthorActivity.class);
startActivity(intent);
        }
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
drawer.closeDrawer(GravityCompat.START);
return true;
    }
private class GetContactsextends AsyncTask<Void, Void, Void> {
@Override
protected void onPreExecute() {
super.onPreExecute();
pDialog= new ProgressDialog(CategoryActivity.this);
```

```
pDialog.setMessage("Please wait...");
pDialog.setCancelable(false);
pDialog.show();
        }
@Override
protected Void doInBackground(Void... arg0) {
JSONParsingsh = new JSONParsing();
String jsonStr = sh.makeServiceCall(url);
Log.e(TAG, "Response from url: " + jsonStr);
if (jsonStr != null) {
try {
JSONObjectjsonObj = new JSONObject(jsonStr);
JSONArray category = jsonObj.getJSONArray("categories");
for (inti = 0; i < category.length(); i++) {</pre>
JSONObject c = category.getJSONObject(i);
                        String id = c.getString("id");
                        String slug = c.getString("slug");
                        String parent = c.getString("parent");
                        String post_count = c.getString("post_count");
                        String title = c.getString("title");
HashMap<String, String> contact = new HashMap<>();
contact.put("id", id);
contact.put("title", title);
contact.put("slug", slug);
contact.put("post count", post count);
CategoryList.add(contact);
                } catch (final JSONException e) {
Log.e(TAG, "Json parsing error: " + e.getMessage());
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Json parsing error: " + e.getMessage(),
Toast.LENGTH LONG)
                                     .show();
                        }
                    });
            } else {
Log.e(TAG, "Couldn't get json from server.");
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Couldn't get json from server. Check LogCat for possible errors!",
Toast.LENGTH LONG)
                                 .show();
                });
            }
return null;
        }
```

```
@Override
protected void onPostExecute(Void result) {
super.onPostExecute(result);

if (pDialog.isShowing())
pDialog.dismiss();

ListAdapter adapter = new SimpleAdapter(
CategoryActivity.this, CategoryList,
R.layout.list_item, new String[]{"title"}, new int[]{R.id.title});

listview.setAdapter(adapter);

}
}
```

```
//AuthorActivity.Java
package com.ewu.saleheen.businessnetwork;
import android.app.ProgressDialog;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
import android.util.Log;
import android.view.View;
import android.support.design.widget.NavigationView;
import android.support.v4.view.GravityCompat;
import android.support.v4.widget.DrawerLayout;
import android.support.v7.app.ActionBarDrawerToggle;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.AdapterView;
import android.widget.ListAdapter;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import android.widget.Toast;
import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;
import java.util.ArrayList;
import java.util.HashMap;
public class AuthorActivityextends AppCompatActivity
implements NavigationView.OnNavigationItemSelectedListener {
private String TAG = AuthorActivity.class.getSimpleName();
private ProgressDialogpDialog;
private ListViewlistview;
private static String url= "http://www.....com/api/get author_index/";
ArrayList<HashMap<String, String>>AuthorList;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity author);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
setSupportActionBar(toolbar);
AuthorList= new ArrayList<>();
listview= (ListView) findViewById(R.id.list);
new GetContacts().execute();
FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
fab.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
                Intent intent= new Intent(AuthorActivity.this, WebActivity.class);
startActivity(intent);
        });
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
ActionBarDrawerToggle toggle = new ActionBarDrawerToggle(
this, drawer, toolbar, R.string.navigation_drawer_open,
```

```
R.string.navigation drawer close);
drawer.setDrawerListener(toggle);
toggle.syncState();
NavigationViewnavigationView = (NavigationView) findViewById(R.id.nav view);
navigationView.setNavigationItemSelectedListener(this);
   }
@Override
public void onBackPressed() {
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer_layout);
if (drawer.isDrawerOpen(GravityCompat.START)) {
drawer.closeDrawer(GravityCompat.START);
       } else {
super.onBackPressed();
        }
    }
@Override
public booleanonCreateOptionsMenu(Menu menu) {
getMenuInflater().inflate(R.menu.author, menu);
return true;
    }
@Override
public booleanonOptionsItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.action settings) {
return true;
return super.onOptionsItemSelected(item);
   }
@SuppressWarnings("StatementWithEmptyBody")
@Override
public booleanonNavigationItemSelected(MenuItem item) {
intid = item.getItemId();
if (id == R.id.nav post) {
           Intent intent = new Intent(AuthorActivity.this, MainActivity.class);
startActivity(intent);
        } else if (id == R.id.nav category) {
           Intent intent= new Intent(AuthorActivity.this, CategoryActivity.class);
startActivity(intent);
else if (id == R.id.nav author) {
        }
DrawerLayout drawer = (DrawerLayout) findViewById(R.id.drawer layout);
drawer.closeDrawer(GravityCompat.START);
return true;
private class GetContactsextends AsyncTask<Void, Void, Void> {
@Override
protected void onPreExecute() {
super.onPreExecute();
pDialog= new ProgressDialog(AuthorActivity.this);
pDialog.setMessage("Please wait...");
pDialog.setCancelable(false);
pDialog.show();
        }
```

```
@Override
protected Void doInBackground(Void... arg0) {
JSONParsingsh = new JSONParsing();
String jsonStr = sh.makeServiceCall(url);
Log.e(TAG, "Response from url: " + jsonStr);
if (jsonStr != null) {
try {
JSONObjectjsonObj = new JSONObject(jsonStr);
JSONArray author = jsonObj.getJSONArray("authors");
for (inti = 0; i<author.length(); i++) {</pre>
JSONObject a = author.getJSONObject(i);
                        String id = a.getString("id");
                         String slug = a.getString("slug");
                        String name = a.getString("name");
HashMap<String, String> contact = new HashMap<>();
contact.put("id", id);
contact.put("name", name);
contact.put("slug", slug);
AuthorList.add(contact);
                } catch (final JSONException e) {
Log.e(TAG, "Json parsing error: " + e.getMessage());
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Json parsing error: " + e.getMessage(),
Toast. LENGTH LONG)
                                     .show();
                    });
                }
            } else {
Log.e(TAG, "Couldn't get json from server.");
runOnUiThread(new Runnable() {
@Override
public void run() {
Toast.makeText(getApplicationContext(),
"Couldn't get json from server. Check LogCat for possible errors!",
Toast. LENGTH LONG)
                                 .show();
                });
            }
return null;
        }
@Override
protected void onPostExecute(Void result) {
super.onPostExecute(result);
```

```
if (pDialog.isShowing())
pDialog.dismiss();
ListAdapter adapter = new SimpleAdapter(
AuthorActivity.this, AuthorList,
R.layout.list_item, new String[]{"name"}, new int[]{R.id.title});
listview.setAdapter(adapter);
}
}
```