PROJECT THESIS

Server Code

```
package com.pgx.java.socket;


import java.net.*;

import java.io.*;

import java.awt.datatransfer.*;

import java.awt.Toolkit;

public class server extends Thread {

  private ServerSocket serverSocket;


  public server(int port) throws IOException {

    serverSocket = new ServerSocket(port);

  }


  @SuppressWarnings("deprecation")

public void run() {

    while(true) {

      try {

        System.out.println("Waiting for client on port " +

          serverSocket.getLocalPort() + "...");

        Socket server = serverSocket.accept();


        System.out.println("Just connected to " + server.getRemoteSocketAddress());

        DataInputStream in = new DataInputStream(server.getInputStream());
```

```
        Runtime runtime = Runtime.getRuntime();     //getting Runtime object
        String a = in.readUTF();
        try
        {
          if(a.equals("0")) {
                    System.out.println("launching chrome");
                   String s[] =  new String[] {"C:\\Program Files
(x86)\\Google\\Chrome\\Application\\chrome.exe"};
                    runtime.exec(s);
          }
          else if(a.equals("1")) {
                    System.out.println("launching dictionary");
                   String s[] =  new String[] {"C:\\Program Files (x86)\\WordWeb\\wweb32.exe"};
                    runtime.exec(s);
          }
          else if(a.equals("2")) {
                    System.out.println("launching opera");
                   String s[] =  new String[] {"C:\\Program Files\\Opera\\launcher.exe"};
                    runtime.exec(s);
          }
          else if(a.equals("3")) {
                    System.out.println("launching powerpoint");
                   String s[] =  new String[] {"C:\\Program Files\\Microsoft
Office\\root\\Office16\\POWERPNT.EXE"};
                    runtime.exec(s);
          }
```

```
        else if(a.equals("4")) {

                System.out.println("launching photoshop");

                String s[] =  new String[] {"C:\\Program Files\\Adobe\\Adobe Photoshop CC
2018\\Photoshop.exe"};

                runtime.exec(s);

        }

        else if(a.equals("5")) {

                System.out.println("launching teamviewer");

                String s[] =  new String[] {"C:\\Program Files (x86)\\TeamViewer\\TeamViewer.exe"};

                runtime.exec(s);

        }

        else if(a.equals("6")) {

                System.out.println("launching video");

                String s[] =  new String[] {"C:\\Program Files (x86)\\Windows Media
Player\\wmplayer.exe"};

                runtime.exec(s);

        }

        else if(a.equals("7")) {

                System.out.println("launching word");

                String s[] =  new String[] {"\"C:\\Program Files\\Microsoft
Office\\root\\Office16\\WINWORD.EXE\""};

                runtime.exec(s);

        }

        else {

        if(a.substring(0,1).equals("8")) {

                System.out.println("launching "+a.substring(1));

                String s =  "C:\\Windows\\System32\\notepad.exe sample.txt";

                Process process = runtime.exec(s);

        }
```

```
    else
    {
        System.out.println(a+" is copied to clipboard");
        StringSelection stringSelection = new StringSelection(a);
        Clipboard clipboard = Toolkit.getDefaultToolkit().getSystemClipboard();
        clipboard.setContents(stringSelection, null);
    }
    }

    //opens new notepad instance

     //OR runtime.exec("notepad");
  }
  catch (IOException e)
  {
     e.printStackTrace();
  }
  DataOutputStream out = new DataOutputStream(server.getOutputStream());
  out.writeUTF("Thank you for connecting to " + server.getLocalSocketAddress()
    + "\nGoodbye!");
  server.close();

} catch (SocketTimeoutException s) {
  System.out.println("Socket timed out!");
  break;
} catch (IOException e) {
  e.printStackTrace();
```

```
        break;
      }
    }
  }

  public static void main(String [] args) {
    int port = 5555;
    try {
      Thread t = new server(port);
      t.start();
    } catch (IOException e) {
      e.printStackTrace();
    }
  }
}
```

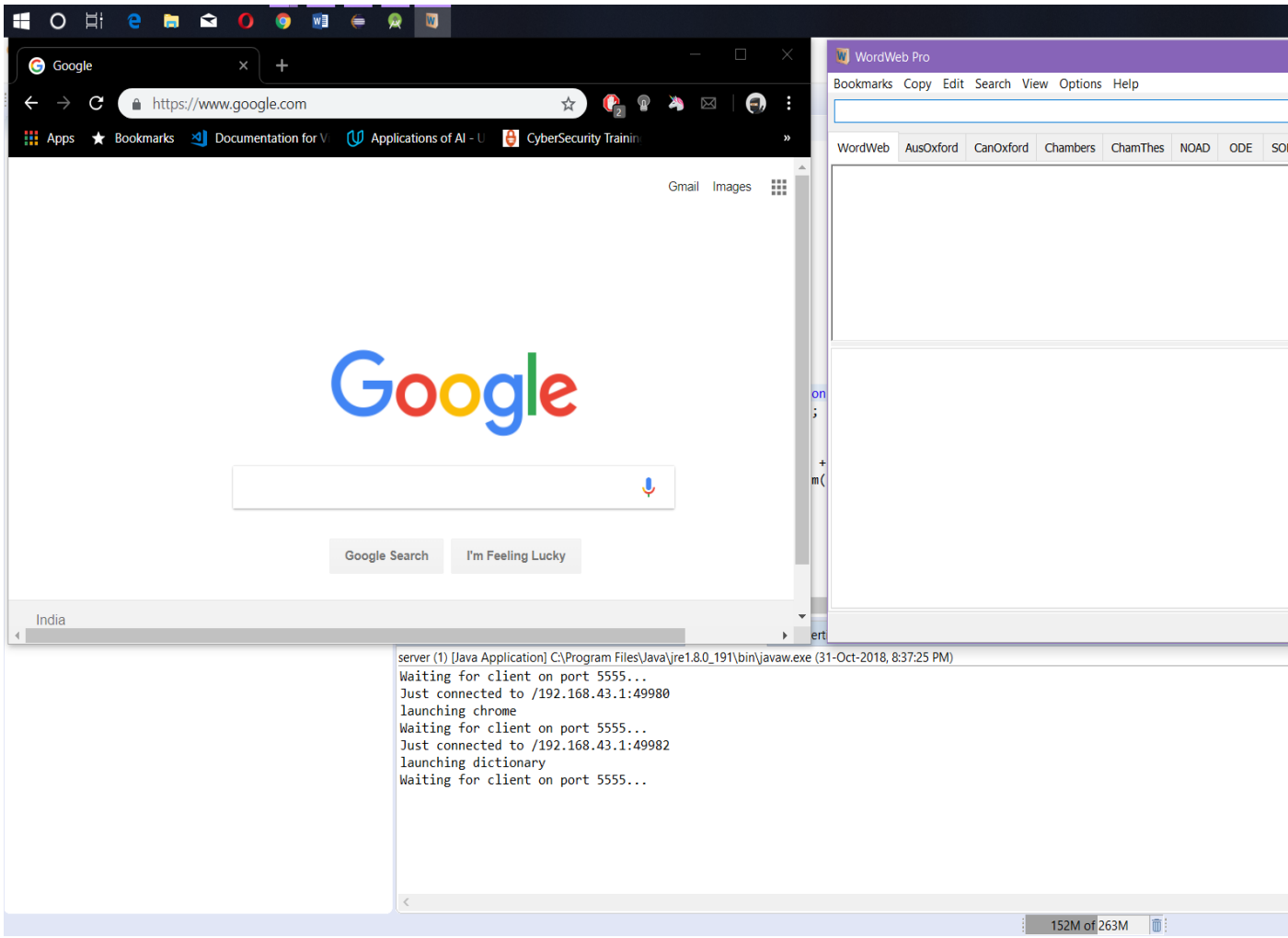
Android client code

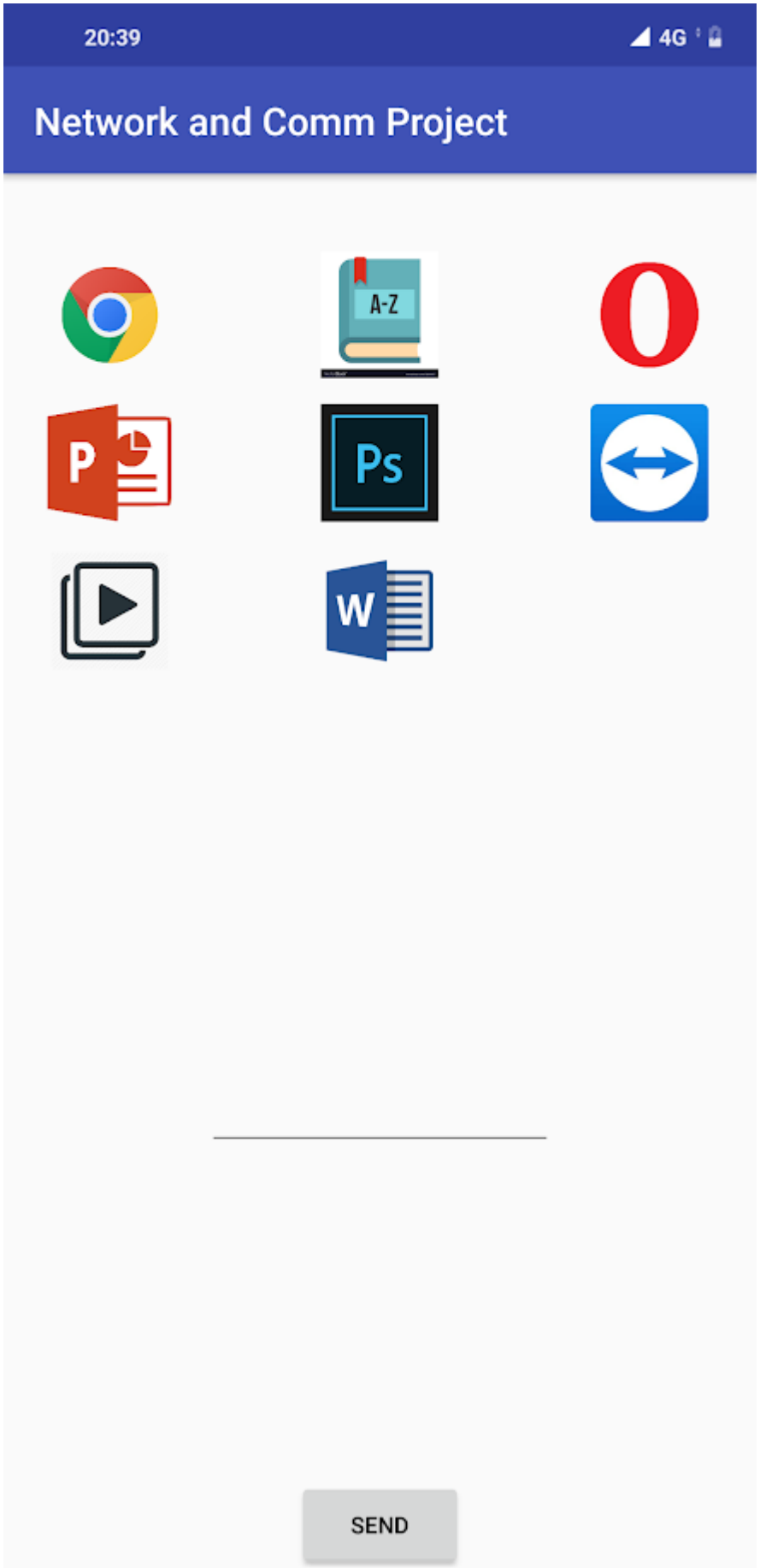
```
package com.example.keshh.myapplication;

import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.os.IBinder;
import android.support.annotation.Nullable;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.EditText;
import android.widget.GridView;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    EditText e1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        GridView gridview = (GridView) findViewById(R.id.gridview);
        gridview.setAdapter(new ImageAdapter(this));

        gridview.setOnItemClickListener(new AdapterView.OnItemClickListener() {
```

```
            public void onItemClick(AdapterView<?> parent, View v,
                                    int position, long id) {
                MessageSender msg = new MessageSender();
                msg.execute(position+"");
            }
        });
    }

    public void send(View V){
        System.out.println("Sent");
        e1 = (EditText)findViewById(R.id.editText);
        MessageSender msg = new MessageSender();
        msg.execute(e1.getText().toString());

    }


}
package com.example.keshh.myapplication;

import android.content.Context;
import android.view.View;
import android.view.ViewGroup;
import android.widget.BaseAdapter;
import android.widget.ImageView;

public class ImageAdapter extends BaseAdapter {
    private Context mContext;

    public ImageAdapter(Context c) {
        mContext = c;
    }

    public int getCount() {
        return mThumbIds.length;
    }

    public Object getItem(int position) {
        return null;
    }

    public long getItemId(int position) {
        return 0;
    }

    // create a new ImageView for each item referenced by the Adapter
    public View getView(int position, View convertView, ViewGroup parent) {
        ImageView imageView;
        if (convertView == null) {
            // if it's not recycled, initialize some attributes
            imageView = new ImageView(mContext);
            imageView.setLayoutParams(new ViewGroup.LayoutParams(185, 185));
            imageView.setScaleType(ImageView.ScaleType.CENTER_CROP);
            imageView.setPadding(8, 8, 8, 8);
        } else {
            imageView = (ImageView) convertView;
        }

        imageView.setImageResource(mThumbIds[position]);
        return imageView;
    }

    // references to our images
    private Integer[] mThumbIds = {
            R.drawable.chrome, R.drawable.dict,
            R.drawable.opera, R.drawable.ppt,
            R.drawable.ps, R.drawable.team,
            R.drawable.video, R.drawable.word
```

```
    };
}
```

Output


Google
https://www.google.com
Apps
Bookmarks
Gmail
Images
Google
Google Search
I'm Feeling Lucky
India
WordWeb Pro
Bookmarks Copy Edit Search View Options Help
WordWeb
AusOxford
CanOxford
Chambers
ChamThes
NOAD
ODE
server (1) [Java Application] C:\Program Files\Java\jre1.8.0_191\bin\javaw.exe (31-Oct-2018, 8:37:25 PM)
Waiting for client on port 5555...
Just connected to /192.168.43.1:49980
launching chrome
Waiting for client on port 5555...
Just connected to /192.168.43.1:49982
launching dictionary
Waiting for client on port 5555...
152M of 263M


20:39
4G
Network and Comm Project
A-Z
P
Ps
W
SEND