**CS560 - Knowledge Discovery and Management**

**Mid Term Source Code**

**package** com.example.edu.kdm.midterm.heartdiseasefinder;

**import** java.io.BufferedReader;

**import** java.io.IOException;

**import** java.io.InputStreamReader;

**import** java.net.MalformedURLException;

**import** java.net.URL;

**import** java.util.ArrayList;

**import** java.util.List;

**import** android.annotation.SuppressLint;

**import** android.app.Activity;

**import** android.os.Bundle;

**import** android.os.StrictMode;

**import** android.view.Menu;

**import** android.view.View;

**import** android.view.View.OnClickListener;

**import** android.webkit.WebView;

**import** android.widget.AdapterView;

**import** android.widget.AdapterView.OnItemSelectedListener;

**import** android.widget.ArrayAdapter;

**import** android.widget.Button;

**import** android.widget.ImageView;

**import** android.widget.Spinner;

**import** android.widget.TextView;

@SuppressLint("NewApi")

**public** **class** DiseaseIdentifierActivity **extends** Activity {

@SuppressLint("NewApi")

@Override

**protected** **void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_disease\_identifier*);

String op= "" ;

StrictMode.ThreadPolicy policy = **new** StrictMode.ThreadPolicy.Builder().permitAll().build();

StrictMode.*setThreadPolicy*(policy);

TextView yesNo = (TextView)findViewById(R.id.*textViewYesNo*);

ImageView ig = (ImageView)findViewById(R.id.*imageViewYesNo*);

TextView disease = (TextView) findViewById(R.id.*textViewDesc*);

**final** Spinner problem = (Spinner) findViewById(R.id.*spinnerHeart*);

**final** Spinner treatment = (Spinner) findViewById(R.id.*spinnerTreat*);

Button prevent = (Button)findViewById(R.id.*buttonPrevent*);

**final** WebView web = (WebView)findViewById(R.id.*webView1*);

**try** {

//URL solr = new URL("file:///C:/Users/Malathy/Desktop/Masters/KDM/exam-midterm/response.html";)

URL solr = **new** URL("http://134.193.136.127:8983/solr/collection1\_shard1\_replica1/select?q=id%3Amkdn9&wt=json&indent=true");

BufferedReader in = **new** BufferedReader(**new** InputStreamReader(solr.openStream()));

String inputLine;

**while** ((inputLine = in.readLine()) != **null**) {

// Process each line.

**if**(inputLine.contains("yes"))

{

op = "yes";

System.*out*.println(op);

}**else** **if**(inputLine.contains("no"))

{

op = "no";

System.*out*.println(op);

}

}

in.close();

} **catch** (MalformedURLException me) {

System.*out*.println(me);

} **catch** (IOException ioe) {

System.*out*.println(ioe);

}

**if** (op.equals("yes"))

{

yesNo.setText("Causes for heart disease is more");

ig.setImageResource(R.drawable.*heart\_badpng*);

disease.setText("Oops!Hurry and Find the possible diseases below");

}

**else** **if** (op.equals("no"))

{

yesNo.setText("You have a good heart!! Keep going");

ig.setImageResource(R.drawable.*heart\_goodpng*);

disease.setText("Protect yourself from diseases below");

}

// if(problem.isSelected())

// System.out.println("value os spinner"+problem.getSelectedItem().toString());

problem.setOnItemSelectedListener(**new** OnItemSelectedListener() {

@Override

**public** **void** onItemSelected(AdapterView<?> arg0, View arg1,

**int** arg2, **long** arg3) {

**if** (String.*valueOf*(problem.getSelectedItem()).equalsIgnoreCase("1: Heart Attack")){

System.*out*.println("value os spinner"+problem.getSelectedItem().toString());

String[] list = getResources().getStringArray(R.array.*heart\_att*);

ArrayAdapter<String> dataAdapter = **new** ArrayAdapter<String>(getApplicationContext(),android.R.layout.*simple\_spinner\_item*, list);

dataAdapter.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);

treatment.setAdapter(dataAdapter);

}

**else** **if** (String.*valueOf*(problem.getSelectedItem()).equalsIgnoreCase("2: Heart Failure")){

System.*out*.println("value os spinner"+problem.getSelectedItem().toString());

String[] list = getResources().getStringArray(R.array.*heart\_fail*);

ArrayAdapter<String> dataAdapter = **new** ArrayAdapter<String>(getApplicationContext(),android.R.layout.*simple\_spinner\_item*, list);

dataAdapter.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);

treatment.setAdapter(dataAdapter);

}

**else** **if** (String.*valueOf*(problem.getSelectedItem()).equalsIgnoreCase("3: Chest Pain")){

System.*out*.println("value os spinner"+problem.getSelectedItem().toString());

String[] list = getResources().getStringArray(R.array.*heart\_chestpains*);

ArrayAdapter<String> dataAdapter = **new** ArrayAdapter<String>(getApplicationContext(),android.R.layout.*simple\_spinner\_item*, list);

dataAdapter.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);

treatment.setAdapter(dataAdapter);

}

**else** **if** (String.*valueOf*(problem.getSelectedItem()).equalsIgnoreCase("4: Abnormal HeartBeat")){

System.*out*.println("value os spinner"+problem.getSelectedItem().toString());

String[] list = getResources().getStringArray(R.array.*heart\_ab*);

ArrayAdapter<String> dataAdapter = **new** ArrayAdapter<String>(getApplicationContext(),android.R.layout.*simple\_spinner\_item*, list);

dataAdapter.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);

treatment.setAdapter(dataAdapter);

}

}

@Override

**public** **void** onNothingSelected(AdapterView<?> arg0) {

**if** (String.*valueOf*(problem.getSelectedItem()).equalsIgnoreCase("1: Heart Attack")){

System.*out*.println("value os spinner"+problem.getSelectedItem().toString());

String[] list = getResources().getStringArray(R.array.*heart\_att*);

ArrayAdapter<String> dataAdapter = **new** ArrayAdapter<String>(getApplicationContext(),android.R.layout.*simple\_spinner\_item*, list);

dataAdapter.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);

treatment.setAdapter(dataAdapter);

}

}

});

treatment.setOnItemSelectedListener(**new** OnItemSelectedListener() {

@Override

**public** **void** onItemSelected(AdapterView<?> arg0, View arg1,

**int** arg2, **long** arg3) {

String op1="";

String final\_place="";

**try** {

//URL solr = new URL("file:///C:/Users/Malathy/Desktop/Masters/KDM/exam-midterm/response.html";)

URL solr1 = **new** URL("http://134.193.136.127:8983/solr/collection1\_shard1\_replica1/select?q=id%3Amkdn10&wt=json&indent=true");

BufferedReader in = **new** BufferedReader(**new** InputStreamReader(solr1.openStream()));

String inputLine;

**int** count=0;

**while** ((inputLine = in.readLine()) != **null**) {

// Process each line.

**if**(count ==1 ){

System.*out*.println("nect line"+inputLine);

op1 =inputLine.split("]")[0];

**int** len = op1.length();//replaceAll("\"", "");

final\_place = op1.substring(1,len);

count=0;

System.*out*.println(final\_place);

}

**if**(inputLine.contains("title")){

System.*out*.println("lineeee"+inputLine);

count =1;

}

//https://www.google.com/maps/search/UNIVERSITY+OF+KANSAS+HOSPITAL/@39.0344109,-94.5720491,14z

}

in.close();

} **catch** (MalformedURLException me) {

System.*out*.println(me);

} **catch** (IOException ioe) {

System.*out*.println(ioe);

}

web.getSettings().setJavaScriptEnabled(**true**);

System.*out*.println("formateedddd"+op1);

//web.loadUrl("https://www.google.com/maps/place/University+of+Kansas+Medical+Center/@39.056244,-94.61074,17z/data=!3m1!4b1!4m2!3m1!1s0x87c0ee2e9019bfed:0xbce5061c05c1ad50");

web.loadUrl("https://www.google.com/maps/search/"+final\_place);

}

@Override

**public** **void** onNothingSelected(AdapterView<?> arg0) {

// **TODO** Auto-generated method stub

}

});

prevent.setOnClickListener(**new** OnClickListener() {

@Override

**public** **void** onClick(View arg0) {

System.*out*.println("button click");

web.getSettings().setJavaScriptEnabled(**true**);

web.loadUrl("http://www.mayoclinic.org/diseases-conditions/heart-disease/in-depth/heart-disease-prevention/art-20046502");

}

});

}

@Override

**public** **boolean** onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.*disease\_identifier*, menu);

**return** **true**;

}

}

**package com.example.edu.kdm.midterm.heartdiseasefinder;**

**import android.os.Bundle;**

**import android.app.Activity;**

**import android.content.Intent;**

**import android.view.Menu;**

**import android.view.View;**

**import android.view.View.OnClickListener;**

**import android.widget.Button;**

**public class InitialActivity extends Activity {**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_initial);**

**Button enter = (Button)findViewById(R.id.enter);**

**enter.setOnClickListener(new OnClickListener() {**

**@Override**

**public void onClick(View v) {**

**Intent intent = new Intent(getApplicationContext(), MainActivity.class);**

**startActivity(intent);**

**}**

**});**

**}**

**@Override**

**public boolean onCreateOptionsMenu(Menu menu) {**

**// Inflate the menu; this adds items to the action bar if it is present.**

**getMenuInflater().inflate(R.menu.initial, menu);**

**return true;**

**}**

**}**

package com.example.edu.kdm.midterm.heartdiseasefinder;

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.view.Menu;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

public class MainActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button submit =(Button)findViewById(R.id.buttonSubmit);

submit.setOnClickListener(new OnClickListener() {

@Override

public void onClick(View v) {

Intent intent = new Intent(getApplicationContext(),DiseaseIdentifierActivity.class);

startActivity(intent);

}

});

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

}

#!/bin/sh

i="9";

ip\_file=""

java -cp target/twitter-naive-bayes-example-1.0-jar-with-dependencies.jar com.chimpler.example.bayes.TweetTSVToSeq ../../data/heartDiseaseIdFullData.txt ../../data/heart-seq$i

#java -cp target/twitter-naive-bayes-example-1.0-jar-with-dependencies.jar com.chimpler.example.bayes.TweetTSVToSeq data/sample ../../data/heart-seq$i

hadoop fs -put ../../data/heart-seq$i

mahout seq2sparse -i heart-seq$i -o heart-vec$i

mahout split -i heart-vec$i/tfidf-vectors --trainingOutput heart-train-vec$i --testOutput heart-tst-vec$i --randomSelectionPct 40 --overwrite --sequenceFiles -xm sequential

mahout trainnb -i heart-train-vec$i -el -li labelindex-heart$i -o model-heart$i -ow -c

mahout testnb -i heart-tst-vec$i -l labelindex-heart$i -m model-heart$i -ow -o heart-result$i -c

echo $i