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CSC7054

MainActivity.java

package com.example.lab4; // Package name

/\*\*

\* Imports required for the android application

\*/

import android.support.v7.app.ActionBarActivity;

import android.graphics.Color;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

/\*\*

\* Class that will be used for a login application

\* @author chrismcclune

\*/

public class MainActivity extends ActionBarActivity {

/\*\*

\* EditText object to be used for the username

\*/

private EditText username = null;

/\*\*

\* EditText object to be used for the password

\*/

private EditText password = null;

/\*\*

\* TextView object to be used for the number of attempts at login

\*/

private TextView attempts = null;

/\*\*

\* Instance int variable to be used for the counter

\*/

private int counter = 3;

/\*\*

\* Override OnCreate method from superclass

\*/

@Override

protected void onCreate(Bundle savedInstanceState) {

// inherit super from onCreate

super.onCreate(savedInstanceState);

// create the layout for the application

setContentView(R.layout.activity\_main);

// assign the username\_entry EditText to username object

username = (EditText) findViewById(R.id.username\_entry);

// assign the password\_entry EditText to password object

password = (EditText) findViewById(R.id.password\_entry);

// assign the attempts\_counter TextView to attempts object

attempts = (TextView) findViewById(R.id.attempts\_counter);

// call setText method from attempts object

attempts.setText(Integer.toString(counter));

// Create the button object called login

final Button login = (Button) findViewById(R.id.login\_button);

// call the onClickListener method from login object

login.setOnClickListener(new View.OnClickListener() {

/\*\*

\* Create the onClick event

\*/

@Override

public void onClick(View v) {

// if statement to make sure that the username and password are both correct

if (((username.getText().toString().equals("username")) && (password.getText().toString().equals("password")))) {

// display a toast to say that the login was successful

Toast.makeText(getBaseContext(),"You have successfully logged in",Toast.LENGTH\_SHORT).show();

} else { // if the login details are not correct

// display the toast to say that the login was not correct

Toast.makeText(getBaseContext(),"You have failed to login", Toast.LENGTH\_SHORT).show();

// set the background colour of attempts TextView to red

attempts.setBackgroundColor(Color.RED);

// decrement the counter to show attempts remaining

counter--;

// display the new counter value

attempts.setText(Integer.toString(counter));

}

// if the number of attempts is 0 then disable the login button

if (counter == 0) {

login.setEnabled(false);

}

}

});

}

/\*\*

\* Method to create the Menu

\*/

@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;

}

/\*\*

\* Method to create the settings options

\*/

@Override

public boolean onOptionsItemSelected(MenuItem item) {

// Handle action bar item clicks here. The action bar will

// automatically handle clicks on the Home/Up button, so long

// as you specify a parent activity in AndroidManifest.xml.

int id = item.getItemId();

if (id == R.id.action\_settings) {

return true;

}

return super.onOptionsItemSelected(item);

}

}