

NowledgeNet developed and designed by



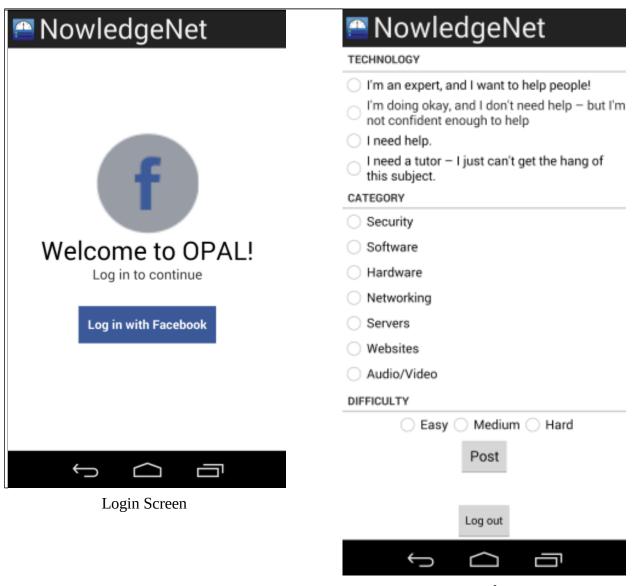
Michael **O**wens – Project Manager Joshua **P**roctor – Marketing/Copyright Management **A**nd

Logan Lopez – Senior Lead Software Developer http://opaltech.us

FBLA 2013 Mobile App Competition

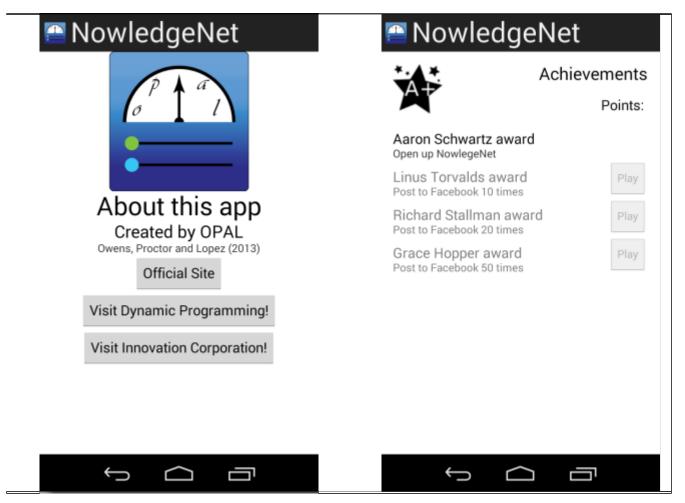
English

Screenshots are made from within $\overline{X}ML$ viewer to capture all of the layout They are taken with the dimensions of a Galaxy Nexus smartphone



Main screen for posting

English (cont.)



About page for app

Achievements center Points not visible due to XML viewer

Spanish
These translations were verified by a native speaker of the Colombian dialect of Spanish

NowledgeNet	NowledgeNet		
f	TECNOLOGIA		
	Yo soy un experto y quiero ayudar a los personas! Yo estoy haciendo bien y no necesito ayuda pero no me siento confiado suficiente para ayudar.		
	You necesito ayuda.		
	Yo necesito un tutor - yo no puedo coger de lo que se trata.		
	CATEGORÍA		
Bienvenido a OPAL!	Seguridad		
	○ Software		
	○ Hardware		
	Redes		
Iniciar sesión con Facebook	Servidores		
	○ Sitios web		
	○ Sonido/Video		
	DIFFICULTAD		
	○ Facil ○ Mediano ○ Difícil		
	Envie		
Login Screen			
S	Salirse		

Main screen for posting

Spanish (cont.)



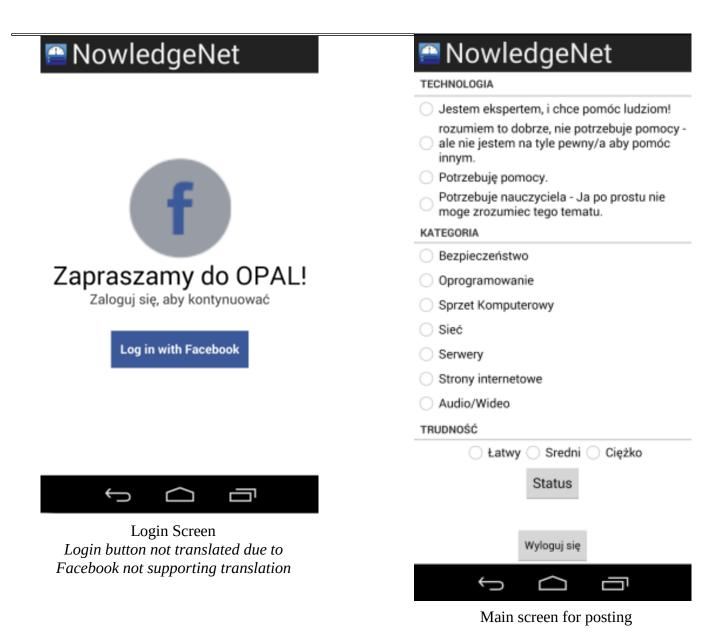
About page for app

Achievements center

Points not visible due to XML viewer

Polish

Polish translations verified by a native speaker



Polish (cont.)



About page for app

Achievements center Points not visible due to XML viewer

Source code

provided in order of importance and also in order of execution of the program flow

```
package com.opaltech.nowledgenet;
import android.annotation.SuppressLint;
public class MainActivity extends FragmentActivity {
   private static final int LOGIN = 0;
  private static final int AUTHED = 1;
   private static final int LOGOUT = 2;
   private static final int FRAGMENT COUNT = LOGOUT +1;
   private boolean isResumed = false;
   public static String difficulty;
  public static String category;
   private WebDialog dialog = null;
  public int techLvl = 0;
   public int score = 0;
  private Fragment[] fragments = new Fragment[FRAGMENT COUNT];
   private UiLifecycleHelper uiHelper;
   private Session.StatusCallback callback =
      new Session.StatusCallback() {
      @Override
      public void call(Session session,
             SessionState state, Exception exception) {
        onSessionStateChange(session, state, exception);
   };
   @Override
   public void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout. activity main);
       //restores any saved score or if no saved score sets to 0
      SharedPreferences sharedPref = this.getSharedPreferences(
              "savedScore", Context. MODE_PRIVATE);
      score = sharedPref.getInt("saved_score", 0);
      uiHelper = new UiLifecycleHelper(this, callback);
      uiHelper.onCreate(savedInstanceState);
      FragmentManager fm = getSupportFragmentManager();
      fragments[LOGIN] = fm.findFragmentBvId(R.id. loginFragment);
      fragments[AUTHED] = fm.findFragmentBvId(R.id. authedFragment);
      fragments[LOGOUT] = fm.findFragmentBvId(R.id. userSettingsFragment);
      FragmentTransaction transaction = fm.beginTransaction();
       for(int i = 0; i < fragments.length; i++) {</pre>
         transaction.hide(fragments[i]);
      transaction.commit();
   @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;
```

```
@Override
public boolean onOptionsItemSelected(MenuItem item) {
   switch (item.getItemId()) {
   case R.id.action about:
       aboutApp();
      return true;
    case R.id.action_achieve:
      goAchieve();
       return true;
   return super.onOptionsItemSelected(item);
public void aboutApp(){
   // when the user goes to the about in the Action bar send them to the about page
   Intent intent = new Intent(this, AboutApp.class);
    startActivity(intent);
private void showFragment(int fragmentIndex, boolean addToBackStack) {
   FragmentManager fm = getSupportFragmentManager();
    FragmentTransaction transaction = fm.beginTransaction();
   for (int i = 0; i < fragments.length; i++) {</pre>
       if (i == fragmentIndex) {
          transaction.show(fragments[i]);
       } else {
           transaction.hide(fragments[i]);
    if (addToBackStack) {
       transaction.addToBackStack( null);
   transaction.commit();
@Override
public void onResume() {
    //restores any saved score or if no saved score sets to 0
    SharedPreferences sharedPref = this.getSharedPreferences(
           "savedScore", Context. MODE_PRIVATE);
   score = sharedPref.getInt("saved_score", 0);
   super.onResume();
   uiHelper.onResume();
   isResumed = true;
@Override
public void onPause() {
   super.onPause();
   uiHelper.onPause();
   isResumed = false;
@Override
public void onActivityResult(int requestCode, int resultCode, Intent data) {
```

```
super.onActivityResult(requestCode, resultCode, data);
   uiHelper.onActivityResult(requestCode, resultCode, data);
@Override
public void onDestroy() {
    SharedPreferences sharedPref = this.getSharedPreferences(
            "savedScore", Context. MODE_PRIVATE);
    SharedPreferences.Editor editor = sharedPref.edit();
    editor.putInt("saved_score", score);
   editor.commit();
   super.onDestroy();
   uiHelper.onDestroy();
@Override
protected void onSaveInstanceState(Bundle outState) {
    super.onSaveInstanceState(outState);
   uiHelper.onSaveInstanceState(outState);
private void onSessionStateChange(Session session, SessionState state, Exception exception) {
    // Only make changes if the activity is visible
   if (isResumed) {
       FragmentManager manager = getSupportFragmentManager();
        // Get the number of entries in the back stack
        int backStackSize = manager.getBackStackEntryCount();
        // Clear the back stack
        for (int i = 0; i < backStackSize; i++) {</pre>
           manager.popBackStack();
        if (state.isOpened()) {
           // If the session state is open:
            // Show the authenticated fragment
           showFragment( AUTHED, false);
       } else if (state.isClosed()) {
        // If the session state is closed:
            // Show the login fragment
           showFragment(LOGIN, false);
@Override
protected void onResumeFragments() {
    super.onResumeFragments();
   Session session = Session.getActiveSession();
   if (session != null && session.isOpened()) {
       // if the session is already open,
       // try to show the selection fragment
       showFragment(AUTHED, false);
    } else {
       // otherwise present the splash screen
       // and ask the person to login.
       showFragment(LOGIN, false);
```

```
public void confidenceSelected(View view) {
   //checks if something was actually checked
   boolean checked = ((RadioButton) view).isChecked();
   //finds out which one was checked and assigns appropriate level
   switch(view.getId()){
       case R.id.radio expertTech:
           if (checked)
               techLvl = 4;
           break;
       case R.id.radio_okayTech:
          if (checked)
              techLvl = 3;
           break:
       case R.id.radio helpTech:
           if (checked)
              techLvl = 2;
           break;
       case R.id.radio tutorTech:
           if (checked)
              techLvl = 1;
           break;
public void difficultySelected(View view) {
   //checks if something was actually checked
   boolean checked = ((RadioButton) view).isChecked();
   //finds out which one was checked and assigns appropriate level
   switch(view.getId()){
       case R.id.radio easy:
           if (checked)
              difficulty = getString(R.string.lvlDiff1);
           break;
       case R.id.radio med:
           if (checked)
               difficulty = getString(R.string.lvlDiff2);
           break;
       case R.id.radio hard:
           if (checked)
              difficulty = getString(R.string.lvlDiff3);
           break:
@SuppressLint("DefaultLocale")
public void categorySelected(View view) {
   //checks if something was actually checked
   boolean checked = ((RadioButton) view).isChecked();
   //finds out which one was checked and assigns appropriate level
   switch(view.getId()){
       case R.id.catSecurity:
           if (checked)
               category = getString(R.string.security).toLowerCase();
           break;
       case R.id.catSoftware:
           if (checked)
              category = getString(R.string.software).toLowerCase();
```

```
case R.id.catHardware:
           if (checked)
               category = getString(R.string.hardware).toLowerCase();
           break;
       case R.id.catNetwork:
           if (checked)
               category = getString(R.string.network).toLowerCase();
           break;
       case R.id.catServer:
           if (checked)
               category = getString(R.string.server).toLowerCase();
           break;
       case R.id.catSite:
           if (checked)
               category = getString(R.string. sites).toLowerCase();
           break;
       case R.id.catAV:
           if (checked)
               category = getString(R.string.a v).toLowerCase();
           break:
   }
public void postHelp(View view){
   // make sure to check that the (1)user filled out everything
   if(techLvl == 0){
       Context context = getApplicationContext();
       CharSequence text = getString(R.string. confidence error);
       int duration = Toast. LENGTH SHORT;
       Toast toast = Toast.makeText(context, text, duration);
       toast.show();
   else if(category == null){
       Context context = getApplicationContext();
       CharSequence text = getString(R.string. category error);
       int duration = Toast.LENGTH_SHORT;
       Toast toast = Toast.makeText(context, text, duration);
       toast.show();
   else if(difficulty == null){
       Context context = getApplicationContext();
       CharSequence text = getString(R.string. difficulty_error);
       int duration = Toast.LENGTH SHORT;
       Toast toast = Toast.makeText(context, text, duration);
       toast.show();
   else{
       score += 1:
       SharedPreferences sharedPref = this.getSharedPreferences(
               "savedScore", Context. MODE_PRIVATE);
       SharedPreferences.Editor editor = sharedPref.edit();
       editor.putInt("saved_score", score);
       editor.commit();
       Bundle params = new Bundle();
       params.putString("message", R.string. requestHelp + category +
```

```
R.string.problemDiff + difficulty + ".");
           showDialogWithoutNotificationBar("apprequests", params);
   private void showDialogWithoutNotificationBar(String action, Bundle params){
       dialog = new WebDialog.Builder(this, Session.getActiveSession(), action, params).
               setOnCompleteListener( new WebDialog.OnCompleteListener() {
               @Override
               public void onComplete(Bundle values, FacebookException error) {
                   if (error != null && !(error instanceof FacebookOperationCanceledException))
{
                           // nothing to do here, except ignore non existent errors in my
perfect code
           }).build();
           Window dialog_window = dialog.getWindow();
           dialog window.setFlags(WindowManager.LayoutParams. FLAG FULLSCREEN,
               WindowManager.LayoutParams.FLAG FULLSCREEN);
           dialog.show();
   public void goAchieve(){
       // when the user goes to the about in the Action bar send them to their achievements
       Intent intent = new Intent(this, AchieveActivity.class);
       startActivity(intent);
   public void logOut(View view){
       showFragment(LOGOUT, true);
```

LoginFragment.java

AuthedFragment.java

AchieveActivity.java

```
package com.opaltech.nowledgenet;
import android.app.Activity;
public class AchieveActivity extends Activity {
   public int score;
   public String strScore;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.activity_achieve);
       // Show the Up button in the action bar.
       setupActionBar();
        // get the score from the preferences file
       SharedPreferences sharedPref = this.getSharedPreferences(
                "savedScore", Context. MODE PRIVATE);
       score = sharedPref.getInt("saved_score", 0);
        //score = 51;
       strScore = Integer. toString(score);
       // them display the score to the user
       TextView txtPoints = (TextView) findViewById(R.id. txtPoints);
       txtPoints.setText(strScore);
       enableAchievements();
   private void setupActionBar() {
       getActionBar().setDisplayHomeAsUpEnabled( true);
   @Override
   public boolean onCreateOptionsMenu(Menu menu) {
       // Inflate the menu; this adds items to the action bar if it is present.
       getMenuInflater().inflate(R.menu. achieve, menu);
       return true;
   public void enableAchievements(){
       // this will change the text back to black in accordance with user score
        // also the textviews are set here to be manipulated for this reason
       TextView linusTitle = (TextView) findViewById(R.id. TextView01);
       TextView linusDescription = (TextView) findViewById(R.id. textView1);
       TextView richardTitle = (TextView) findViewById(R.id. TextView02);
        TextView richardDescription = (TextView) findViewById(R.id. textView2);
       TextView graceTitle = (TextView) findViewById(R.id. TextView03);
       TextView graceDescription = (TextView) findViewBvId(R.id. textView4);
        // can't forget the buttons
        Button btnLinus = (Button) findViewById(R.id. btnLinus);
        Button btnRichard = (Button) findViewById(R.id. btnRichard);
        Button btnGrace = (Button) findViewById(R.id. btnGrace);
        if(score >= 50){
            linusTitle.setTextColor(Color.parseColor("#000000"));
           linusDescription.setTextColor(Color. parseColor("#000000"));
            richardTitle.setTextColor(Color. parseColor("#000000"));
            richardDescription.setTextColor(Color. parseColor("#000000"));
            graceTitle.setTextColor(Color. parseColor("#000000"));
            graceDescription.setTextColor(Color. parseColor("#000000"));
            btnLinus.setEnabled( true);
            btnRichard.setEnabled(true);
```

AchieveActivity.java

```
btnGrace.setEnabled(true);
    }
    else if(score >= 20){
       linusTitle.setTextColor(Color.parseColor("#000000"));
       linusDescription.setTextColor(Color. parseColor("#000000"));
       richardTitle.setTextColor(Color.parseColor("#000000"));
       richardDescription.setTextColor(Color.parseColor("#000000"));
       btnLinus.setEnabled(true);
       btnRichard.setEnabled(true);
    }
    if(score >= 10){}
       linusTitle.setTextColor(Color. parseColor("#000000"));
       linusDescription.setTextColor(Color. parseColor("#000000"));
       btnLinus.setEnabled( true);
@Override
public boolean onOptionsItemSelected(MenuItem item) {
   switch (item.getItemId()) {
   case android.R.id.home:
       NavUtils.navigateUpFromSameTask(this);
       return true;
    case R.id.action about:
      aboutApp();
       return true;
    return super.onOptionsItemSelected(item);
public void aboutApp(){
   // when the user goes to the about in the Action bar send them to the about page
   Intent intent = new Intent(this, AboutApp.class);
   startActivity(intent);
public void playLinus(View view){
   MediaPlayer mediaPlayer = MediaPlayer. create(this, R.raw.strings);
   mediaPlayer.start();
public void playRichard(View view){
   MediaPlayer mediaPlayer = MediaPlayer. create(this, R.raw.slim scape);
   mediaPlayer.start();
public void playGrace(View view){
   MediaPlayer mediaPlayer = MediaPlayer. create(this, R.raw.christmas tree);
   mediaPlayer.start();
```

AboutApp.java

```
package com.opaltech.nowledgenet;
import android.app.Activity;
public class AboutApp extends Activity {
   @Override
   protected void onCreate(Bundle savedInstanceState) {
       super.onCreate(savedInstanceState);
       setContentView(R.layout.about app);
       // Show the Up button in the action bar.
       setupActionBar();
   }
     * Set up the {@link android.app.ActionBar}.
    private void setupActionBar() {
       getActionBar().setDisplayHomeAsUpEnabled( true);
   @Override
   public boolean onCreateOptionsMenu(Menu menu) {
       // Inflate the menu; this adds items to the action bar if it is present.
       getMenuInflater().inflate(R.menu. about app, menu);
       return true;
   }
   @Override
   public boolean onOptionsItemSelected(MenuItem item) {
       switch (item.getItemId()) {
       case android.R.id.home:
           NavUtils.navigateUpFromSameTask(this);
          return true;
       return super.onOptionsItemSelected(item);
   public void visitInnovation(View view){
       // When button is pressed bring up website for iN using browser
       Uri webpage = Uri.parse("http://innovationcorporation.net/");
       Intent webIntent = new Intent(Intent.ACTION_VIEW, webpage);
       startActivity(webIntent);
    public void visitDynPro(View view){
       // Same thing here except with DynPro site
       Uri webpage = Uri.parse("http://burnedtoast.cu.cc/?pk_campaign=NowledgeNet");
       Intent webIntent = new Intent(Intent.ACTION VIEW, webpage);
       startActivity(webIntent);
    public void visitOPAL(View view){
        // I still think we should've went with my idea of a domain
       Uri webpage = Uri.parse("http://opaltech.us");
       Intent webIntent = new Intent(Intent.ACTION_VIEW, webpage);
        startActivity(webIntent);
```

AboutApp.java

```
public void bringBaan(View view){
    // huehuehue
    Context context = getApplicationContext();
    CharSequence text = "Bring Baan";
    int duration = Toast. LENGTH_SHORT;

    Toast toast = Toast. makeText(context, text, duration);
    toast.show();
}
```

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
kLinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout width="fill parent"
  android:layout height="fill parent"
   android:gravity="center"
  android:orientation="vertical" >
   <fragment android:name="com.opaltech.nowledgenet.LoginFragment"</pre>
         android:id="@+id/loginFragment"
         android:layout_width="match_parent"
         android:layout_height="match_parent" />
   <fragment android:name="com.opaltech.nowledgenet.AuthedFragment"</pre>
         android:id="@+id/authedFragment"
         android:layout width="match parent"
         android:layout_height="match_parent" />
   <fragment android:name="com.facebook.widget.UserSettingsFragment"</pre>
         android:id="@+id/userSettingsFragment"
         android:layout_width="match_parent"
         android:layout_height="match_parent" />
</LinearLayout>
```

login_fragment.xml

```
<?xml version="1.0" encoding="utf-8"?>
kLinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout width="fill parent"
   android:layout height="fill parent"
   android:gravitv="center"
  android:orientation="vertical" >
   <ImageView</pre>
       android:id="@+id/imageView1"
       android:layout width="132dp"
       android:layout_height="134dp"
       android:scaleType="centerCrop"
       android:src="@drawable/facebook icon"
       tools:ignore="ContentDescription" />
   <TextView
       android:id="@+id/bigtitle"
       android:layout width="wrap content"
       android:lavout height="wrap content"
       android:text="@string/welcome"
       android:textAppearance="?android:attr/textAppearanceLarge"
       android:textSize="@dimen/lgTitle" />
   <TextView
       android:id="@+id/textView4"
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:text="@string/loginlabel"
       android:textAppearance="?android:attr/textAppearanceSmall"
       android:textSize="@dimen/s mTitle" />
   <com.facebook.widget.LoginButton</pre>
           android:id="@+id/login_button"
           android:layout width="wrap content"
          android:layout_height="wrap_content"
           android:layout_gravity="center_horizontal"
           android:layout marginTop="30dp"
           android:layout marginBottom="30dp"
           android:onClick="facebookAuth" />
</LinearLayout>
```

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView
   xmlns:android="http://schemas.android.com/apk/res/android"
   android:id="@+id/scrollView1"
   android:layout_width= "match_parent"
   android:lavout height= "match parent" >
    <LinearLayout
       android:layout_width= "fill_parent"
       android:layout_height= "wrap_content"
       android:gravity= "left"
       android:orientation= "vertical" >
    <TextView
       android:id= "@+id/text_tech"
       style="?android:attr/listSeparatorTextViewStyle"
       android:layout_width= "match_parent"
       android:layout_height= "wrap content"
        android:text= "@string/tech"
       android:textAppearance= "?android:attr/textAppearanceMedium" />
   <RadioGroup
       android:id= "@+id/radioTech"
       android:layout_width= "wrap_content"
       android:lavout height= "wrap content" >
       <RadioButton
           android:id= "@+id/radio expertTech"
           android:layout_width= "wrap_content"
           android:layout height= "wrap content"
           android:onClick= "confidenceSelected"
           android:text= "@string/expert" />
        <RadioButton
           android:id= "@+id/radio okayTech"
           android:layout_width= "wrap_content"
           android:layout_height= "wrap_content"
           android:onClick= "confidenceSelected"
            android:text= "@string/okay" />
       <RadioButton
           android:id= "@+id/radio helpTech"
           android:layout_width= "wrap_content"
           android:layout_height= "wrap_content"
           android:onClick= "confidenceSelected"
           android:text= "@string/help" />
        <RadioButton
           android:id= "@+id/radio tutorTech"
           android:layout width= "wrap content"
           android:layout height= "wrap content"
           android:onClick= "confidenceSelected"
           android:text= "@string/tutor" />
   </RadioGroup>
       <TextView
           android:id= "@+id/category"
           style= "?android:attr/listSeparatorTextViewStyle"
           android:layout width= "match_parent"
```

```
android:layout_height= "wrap_content"
    android:paddingTop= "5dip"
    android:text= "@string/category"
    android:textAppearance= "?android:attr/textAppearanceLarge" />
<RadioGroup
    android:id= "@+id/techCategory"
    android:layout width= "wrap_content"
    android:lavout height= "wrap content"
    <RadioButton
        android:id= "@+id/catSecurity"
        android:layout_width= "wrap_content"
        android:layout_height= "wrap_content"
        android:text= "@string/security" />
    <RadioButton
        android:id= "@+id/catSoftware"
        android:layout width= "wrap_content"
        android:layout height= "wrap content"
        android:onClick= "categorySelected"
        android:text= "@string/software" />
    <RadioButton
        android:id= "@+id/catHardware"
        android:lavout width= "wrap content"
        android:layout height= "wrap_content"
        android:onClick= "categorySelected"
        android:text= "@string/hardware" />
    <RadioButton</pre>
        android:id= "@+id/catNetwork"
        android:layout_width= "wrap_content"
        android:layout height= "wrap_content"
        android:onClick= "categorySelected"
        android:text= "@string/network" />
    <RadioButton
        android:id= "@+id/catServer"
        android:layout width= "wrap content"
        android:layout_height= "wrap content"
        android:onClick= "categorySelected"
android:text= "@string/server" />
    <RadioButton
        android:id= "@+id/catSite"
        android:layout_width= "wrap_content"
        android:layout height= "wrap_content"
        android:onClick= "categorySelected"
        android:text= "@string/sites" />
    <RadioButton
        android:id= "@+id/catAV"
        android:layout width= "wrap_content"
        android:layout height= "wrap content"
        android:onClick= "categorySelected"
        android:text= "@string/a_v" />
```

```
</RadioGroup>
<TextView
    android:id= "@+id/difficulty"
    style= "?android:attr/listSeparatorTextViewStyle"
    android:layout_width= "match_parent"
    android:layout_height= "wrap_content"
    android:paddingTop= "5dip"
    android:text= "@string/difficulty"
    android:textAppearance= "?android:attr/textAppearanceLarge"
<RadioGroup
    android:id= "@+id/radioDifficulty"
    android:layout_width= "wrap_content"
    android:layout height= "wrap_content"
    android:layout_gravity= "center_horizontal"
    android:orientation= "horizontal" >
    <RadioButton
        android:id= "@+id/radio easy"
        android:layout_width= "match_parent"
        android:layout_height= "match_parent"
        android:layout_gravity= "left|start"
        android:onClick= "difficultySelected"
        android:text= "@string/easy" />
    <RadioButton
        android:id= "@+id/radio med"
        android:layout width= "match_parent"
        android:layout height= "match parent"
        android:onClick= "difficultySelected"
        android:text= "@string/med" />
    <RadioButton
        android:id= "@+id/radio hard"
        android:layout_width= "match_parent"
        android:layout_height= "match_parent"
        android:onClick= "difficultySelected"
        android:text= "@string/hard" />
</RadioGroup>
<Button
    android:id= "@+id/btnPost"
    android:layout_width= "wrap_content"
    android:layout_height= "wrap_content"
    android:layout_gravity= "center_horizontal"
    android:onClick= "postHelp"
    android:text= "@string/post" />
<Button
    android:id= "@+id/btnLogout"
    style= "?android:attr/buttonStyleSmall"
    android:layout_width= "wrap_content"
    android:layout height= "wrap_content"
    android:layout_gravity= "bottom|center"
    android:layout_marginTop= "@dimen/lgTitle"
    android:onClick= "logOut"
```

<pre>android:text= "@string/logout" /></pre>	
android:onClick="facebookLogout"	
(/ScrollViews	

activity achieve.xml

```
<RelativeLavout xmlns:android= "http://schemas.android.com/apk/res/android"</pre>
   xmlns:tools="http://schemas.android.com/tools"
   android:id="@+id/RelativeLayout1"
   android:layout width="match parent"
   android:layout_height="match parent"
   android:orientation="vertical"
   android:paddingBottom="@dimen/activity_vertical_margin"
   android:paddingLeft="@dimen/activity_horizontal_margin"
   android:paddingRight="@dimen/activity_horizontal_margin"
   android:paddingTop="@dimen/activity vertical margin"
   tools:context=".AchieveActivity" >
   <ImageView</pre>
       android:id="@+id/imageView1"
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:layout alignParentLeft="true"
       android:layout_alignParentTop="true"
       android:src="@drawable/youwon"
       tools:ignore="ContentDescription" />
   <TextView
       android:id="@+id/achievemenTitle"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout_alignParentRight="true"
       android:layout_alignTop="@+id/imageView1"
        android:text="@string/action_achieve"
       android:textAppearance="?android:attr/textAppearanceLarge" />
   <TextView
       android:id="@+id/as title"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_alignLeft="@+id/imageView1"
       android:layout_below="@+id/imageView1"
       android:layout marginTop="22dp"
       android:text="@string/aaron_schwartz"
       android:textAppearance="?android:attr/textAppearanceMedium" />
   <TextView
       android:id="@+id/TextView01"
       android:layout_width="wrap content"
       android:layout_height="wrap_content"
       android:layout alignLeft="@+id/as description"
       android:layout_below="@+id/as_description"
       android:layout_marginTop="@dimen/smTitle"
       android:text="@string/linus_award"
       android:textAppearance="?android:attr/textAppearanceMedium"
       android:textColor="@color/gray" />
   <TextView
       android:id="@+id/as description"
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:layout_alignLeft="@+id/as_title"
       android:layout below="@+id/as title"
       android:text="@string/as description"
```

activity_achieve.xml

```
android:textAppearance= "?android:attr/textAppearanceSmall" />
   android:id="@+id/textView1"
   android:layout_width="wrap_content"
   android:layout height="wrap content"
   android:layout_below="@+id/TextView01"
   android:text="@string/lt description"
   android:textAppearance="?android:attr/textAppearanceSmall"
   android:textColor="@color/gray" />
<TextView
   android:id="@+id/TextView02"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:layout_alignLeft="@+id/textView1"
   android:layout below="@id/textView1"
   android:layout_marginTop="@dimen/smTitle"
   android:text="@string/richard award"
   android:textAppearance="?android:attr/textAppearanceMedium"
   android:textColor="@color/gray" />
<TextView
   android:id="@+id/textView2"
   android:layout_width="wrap content"
   android:layout_height="wrap_content"
   android:layout_alignParentLeft="true"
    android:layout_below="@+id/TextView02"
   android:text="@string/rs_description"
   android:textAppearance="?android:attr/textAppearanceSmall"
   android:textColor="@color/gray" />
<TextView
   android:id="@+id/TextView03"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout_alignLeft="@+id/textView2"
   android:layout below="@+id/textView2"
   android:layout_marginTop="@dimen/smTitle"
   android:text="@string/grace award"
   android:textAppearance="?android:attr/textAppearanceMedium"
   android:textColor="@color/gray" />
<TextView
   android:id="@+id/txtPoints"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout above="@+id/as title"
   android:layout alignRight="@+id/achievemenTitle"
   android:textAppearance="?android:attr/textAppearanceMedium" />
<TextView
   android:id="@+id/textView3"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout alignBottom="@+id/txtPoints"
    android:layout toLeftOf="@+id/txtPoints"
```

activity_achieve.xml

```
android:text= "@string/points"
       android:textAppearance="?android:attr/textAppearanceMedium" />
   <TextView
       android:id="@+id/textView4"
       android:lavout width="wrap content"
       android:layout_height="wrap_content"
       android:layout_alignParentLeft="true"
       android:layout_below="@+id/TextView03"
       android:text="@string/gh hopper"
       android:textAppearance="?android:attr/textAppearanceSmall"
       android:textColor="@color/gray" />
   <Button
       android:id="@+id/btnGrace"
       style="?android:attr/buttonStyleSmall"
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:layout_alignBaseline="@+id/TextView03"
       android:layout alignBottom="@+id/TextView03"
       android:layout_alignLeft="@+id/btnRichard"
       android:enabled="false"
       android:onClick="playGrace"
       android:text="@string/play" />
    <Button
       android:id="@+id/btnRichard"
       style="?android:attr/buttonStyleSmall"
       android:layout width="wrap content"
       android:layout height="wrap content"
       android:layout alignBaseline="@+id/TextView02"
       android:lavout alignBottom="@+id/TextView02"
       android:layout alignRight="@+id/txtPoints"
       android:enabled="false"
       android:onClick="playRichard"
       android:text="@string/play" />
    <Button
       android:id="@+id/btnLinus"
       stvle="?android:attr/buttonStvleSmall"
       android:layout width="wrap content"
       android:layout_height="wrap_content"
       android:layout_alignBaseline="@+id/TextView01"
       android:layout alignBottom="@+id/TextView01"
       android:layout_alignLeft="@+id/btnRichard"
       android:enabled="false"
       android:onClick="playLinus"
       android:text="@string/play" />
</RelativeLayout>
```

about_app.xml

```
<?xml version="1.0" encoding="utf-8"?>
<ScrollView
   android:lavout width= "match parent"
   android:layout_height="match_parent"
   xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:orientation="vertical" >
<LinearLayout</pre>
   android:layout width="match parent"
   android:layout_height="wrap_content"
   android:gravity="center"
   android:orientation="vertical" >
   <ImageView</pre>
       android:id="@+id/imageView1"
       android:layout width="180sp"
       android:layout_height="180sp"
       android:onClick="bringBaan"
       android:src="@drawable/logo opal"
       tools:ignore="ContentDescription" />
    <TextView
       android:id="@+id/bigtitle"
       android:layout_width="wrap content"
       android:layout_height="wrap_content"
       android:text="@string/aboutthisapp"
       android:textAppearance="?android:attr/textAppearanceLarge"
       android:textSize="@dimen/lgTitle" />
   <TextView
       android:id="@+id/as description"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="@string/createdby"
       android:textAppearance="?android:attr/textAppearanceMedium"
       android:textSize="@dimen/mdTitle" />
   <TextView
       android:id="@+id/textView4"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:text="@string/copyright"
       android:textAppearance="?android:attr/textAppearanceSmall" />
   <Button
       android:id="@+id/btnOPAL"
       android:layout_width="wrap_content"
       android:layout height="wrap content"
       android:onClick="visitOPAL"
       android:text="@string/OPALsite" />
   <Button
       android:id="@+id/btnDynPro"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:onClick="visitDynPro"
       android:text="@string/visitdynpro" />
```

about_app.xml

<button< th=""></button<>
android:id= "@+id/btnInnovation"
android:layout width="wrap content"
android:layout height="wrap content"
android:onClick="visitInnovation"
<pre>android:text="@string/visitinnovation" /></pre>

Menus XML for each of the Action Bar menus

main.xml

<menu xmlns:android="http://schemas.android.com/apk/res/android" >

about_app.xml

<menu xmlns:android="http://schemas.android.com/apk/res/android" >

achieve.xml

<menu xmlns:android="http://schemas.android.com/apk/res/android" >

Values

Where virtually all the strings are stored, there will be multiple copies of the same named file but they reside in different folders for translation and will be noted clearly

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
   <string name= "app_name" > NowledgeNet</string>
   <string name= "action about" > About </string>
   <string name="expert">I\'m an expert, and I want to help people!</string>
    <string name="okay">I\'m doing okay, and I don\'t need help - but I\'m not confident enough
to help</string>
   <string name="help">I need help.</string>
   <string name="tutor">I need a tutor - I just can\'t get the hang of this subject.</string>
   <string name= "tech">Technology</string>
   <string name= "welcome" > Welcome to OPAL! </string>
   <string name="loginlabel">Log in to continue</string>
   <string name= "aboutthisapp" > About this app</string>
   <string name="createdby">Created by OPAL</string>
   <string name="copyright">Owens, Proctor and Lopez (2013)</string>
   <string name="visitinnovation">Visit Innovation Corporation!</string>
   <string name= "visitdynpro" > Visit Dynamic Programming! </string>
   <string name= "facebooklogin" >Log in</string>
   <string name= "title_activity_facebook_login" >Login to Facebook</string>
   <string name= "title_activity_about_app" >About This App</string>
   <string name= "action settings" >Settings
   <string name= "action_achieve" >Achievements</string>
   <string name= "app_id">257306584421087</string>
   <string name= "category" >Category</string>
   <string name="security">Security</string>
   <string name= "software" > Software < / string >
   <string name= "hardware" >Hardware</string>
   <string name= "network">Networking</string>
   <string name= "server" > Servers < / string >
   <string name= "a_v">Audio/Video</string>
   <string name="sites">Websites</string>
   <string name="post">Post</string>
   <string name= "difficulty" > Difficulty < / string >
   <string name= "easy">Easy</string>
   <string name= "med">Medium</string>
   <string name= "hard">Hard</string>
   <string name="logout">Log out</string>
   <string name="OPALsite">Official Site</string>
   <string name="title activity achieve" >Achievements</string>
   <string name= "aaron schwartz" >Aaron Schwartz award</string>
   <string name= "as_description" >Open up NowlegeNet</string>
   <string name="linus_award">Linus Torvalds award</string>
   <string name="lt_description">Post to Facebook 10 times</string>
   <string name= "richard award" > Richard Stallman award
   <string name="rs_description">Post to Facebook 20 times</string>
   <string name="points">"Points: "</string>
   <string name="grace_award">Grace Hopper award</string>
   <string name="gh hopper">Post to Facebook 50 times</string>
   <string name= "play">Play</string>
   <string name="confidence error">Select a confidence level</string>
   <string name="category_error">Select a category</string>
   <string name="difficulty_error">Select a difficulty level</string>
   <string name="lvlDiff1">easy</string>
   <string name="lvlDiff2">a challenge</string>
   <string name="lvlDiff3">really hard</string>
   <string name= "requestHelp">"I need help in "</string>
   <string name="problemDiff">" and I think my problem is "</string>
```

strings.xml

dimens.xml

styles.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <!--
      Base application theme, dependent on API level. This theme is replaced
      by AppBaseTheme from res/values-vXX/styles.xml on newer devices.
   <style name="AppBaseTheme" parent="android:Theme.Light">
          Theme customizations available in newer API levels can go in
      res/values-vXX/styles.xml, while customizations related to
          backward-compatibility can go here.
     -->
  </style>
   <!-- Application theme. -->
  <style name="AppTheme" parent="AppBaseTheme">
   <!-- All customizations that are NOT specific to a particular API-level can go here. -->
  </style>
   <style name="LoginFormContainer">
   <item name="android:layout_width">match_parent</item>
      <item name="android:layout height">wrap content</item>
      <item name="android:padding">16dp</item>
   </style>
</resources>
```

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
   <string name= "app_name" >NowledgeNet</string>
   <string name="action about">Acerca de</string>
   <string name="expert">Yo soy un experto y quiero ayudar a los personas!</string>
    <string name="okay">Yo estoy haciendo bien y no necesito ayuda pero no me siento confiado
suficiente para ayudar.</string>
   <string name="help">You necesito ayuda.</string>
   <string name="tutor">Yo necesito un tutor - yo no puedo coger de lo que se trata.</string>
   <string name= "tech">Tecnologia</string>
   <string name= "welcome" > Bienvenido a OPAL! </string>
   <string name="loginlabel">Introducete para continuar</string>
   <string name= "aboutthisapp" >Acerca de esta app</string>
   <string name="createdby">Creado por OPAL</string>
   <string name="copyright">Owens, Proctor v Lopez (2013)</string>
   <string name= "visitinnovation" > Visitá Innovation Corporation! 
   <string name="visitdynpro">Visitá Dynamic Programming!</string>
   <string name="facebooklogin">Iniciar sesión</string>
   <string name= "title_activity_facebook_login" >Entrar a Facebook</string>
   <string name= "title_activity_about_app" >Acerca De Esta App</string>
   <string name= "action achieve" >Logros</string>
   <string name="app id">257306584421087</string>
   <string name="category">Categoría</string>
   <string name="security">Seguridad</string>
   <string name= "software" >Software</string>
   <string name= "hardware" >Hardware</string>
   <string name= "network" > Redes </string>
   <string name="server">Servidores</string>
   <string name="a_v">Sonido/Video</string>
   <string name="sites">Sitios web</string>
   <string name="post">Envie</string>
   <string name= "difficulty" > Difficultad </string>
   <string name="easy">Facil</string>
   <string name= "med">Mediano</string>
   <string name= "hard" >Difícil</string>
   <string name= "logout" > Salirse </string>
   <string name= "OPALsite" >Sitio Official</string>
   <string name="title activity achieve" >Logros</string>
   <string name= "aaron schwartz" >Aaron Schwartz premio</string>
   <string name= "as description" >Ejecutar NowlegeNet</string>
   <string name="linus_award">Linus Torvalds premio</string>
   <string name="lt_description">Envie a Facebook 10 veces</string>
   <string name="richard_award">Richard Stallman premio</string>
   <string name= "rs description" >Envie a Facebook 20 veces</string>
   <string name="points">"Puntos: "</string>
   <string name="grace_award">Grace Hopper premio</string>
   <string name="gh_hopper">Envie a Facebook 50 veces</string>
   <string name="play">Juega</string>
   <string name="confidence error">Seleccionar un nivel de confidencia</string>
   <string name= "category error" >Selectionar un categoría</string>
   <string name="difficulty_error">Seleccione un nivel de dificultad</string>
   <string name="lvlDiff1">facil</string>
   <string name="lvlDiff2">un reto</string>
   <string name="lvlDiff3">muy difícil</string>
   <string name= "requestHelp">"Yo necesito ayuda en "</string>
   <string name="problemDiff">" y yo pienso mi problema es "</string>
</resources>
```

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name= "app_name" >NowledgeNet</string>
   <string name="action about">O</string>
    <string name="expert">Jestem ekspertem, i chce pomóc ludziom!</string>
    <string name="okay">rozumiem to dobrze, nie potrzebuje pomocy - ale nie jestem na tyle
pewny/a aby pomóc innym.</string>
    <string name= "help">Potrzebuję pomocy.</string>
    <string name="tutor">Potrzebuje nauczyciela - Ja po prostu nie moge zrozumiec tego
tematu.</string>
    <string name= "tech">Technologia</string>
   <string name= "welcome" >Zapraszamy do OPAL!</string>
    <string name= "loginlabel" >Zaloguj się, aby kontynuować</string>
   <string name= "aboutthisapp" > 0 tej aplikacji</string>
   <string name= "createdby">Stworzony przez OPAL</string>
   <string name="copyright">Owens, Proctor i Lopez (2013)
   <string name="visitinnovation">Odwiedź Innovation Corporation!</string>
   <string name= "visitdynpro" >Odwiedź Dynamic Programming!</string>
   <string name= "facebooklogin" >Zaloguj się </string>
   <string name="title_activity_facebook_login" >Zaloguj sie na Facebooka</string>
   <string name= "title_activity_about_app" >0 tej aplikacji</string>
   <string name= "action_achieve" >Osiągnięcia</string>
   <string name= "app_id" > 257306584421087 
   <string name="category">Kategoria</string>
   <string name= "security" > Bezpieczeństwo</string>
   <string name= "software" >Oprogramowanie</string>
   <string name= "hardware">Sprzet Komputerowy</string>
   <string name= "network" >Sieć</string>
   <string name= "server">Serwery</string>
   <string name= "a_v">Audio/Wideo</string>
   <string name= "sites">Strony internetowe</string>
    <string name="post">Status</string>
   <string name="difficulty">Trudność</string>
   <string name="easy">Łatwy</string>
   <string name= "med">Sredni</string>
   <string name= "hard">Ciężko </string>
   <string name="logout">Wyloguj się</string>
   <string name= "OPALsite" > Strona oficjalna
   <string name= "title activity achieve" >Osiagniecia</string>
   <string name="aaron schwartz">Aaron Schwartz nagroda</string>
   <string name= "as_description" >Otworzyć NowlegeNet</string>
   <string name="linus_award">Linus Torvalds nagroda</string>
   <string name="lt_description">Opublikuj na Facebooka 10 razy</string>
   <string name= "richard award" >Richard Stallman nagroda
   <string name="rs_description">Opublikuj na Facebooka 20 razy</string>
   <string name="points">"Punkty: "</string>
   <string name="grace_award">Grace Hopper nagroda</string>
   <string name="gh hopper">Opublikuj na Facebooka 50 razy</string>
   <string name= "play">Odtwórz</string>
   <string name= "confidence error" >Wybierz poziom ufności</string>
   <string name="category_error">Wybierz kategorie</string>
   <string name= "difficulty_error" >Wybierz poziom trudności</string>
   <string name="lvlDiff1">łatwy</string>
   <string name="lvlDiff2">wyzwanie</string>
   <string name="lvlDiff3">naprawde cieżko</string>
   <string name= "requestHelp">"Potrzebuję pomocy w "</string>
    <string name="problemDiff">" i myślę, że mój problem jest "</string>
```

strings.xml