Michael Rzepka – 34

Haritha Rao – 14

# GroceryBuddy

## Android Java Code

### MainActivity.java

package com.umkc.sg11.grocerybuddy;

import android.app.Activity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

public class MainActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

/\*\* Called when the user clicks the Find Grocery Store button \*/

public void findStore(View view) {

Intent intent = new Intent(this, FindGroceryActivity.class);

startActivity(intent);

}

/\*\* Called when the user clicks the Curate Recipes button \*/

public void curateRecipes(View view) {

Intent intent = new Intent(this, CurateRecipeActivity.class);

startActivity(intent);

}

}

### FindGroceryActivity.java

package com.umkc.sg11.grocerybuddy;

import java.util.List;

import android.app.Activity;

import android.content.Context;

import android.location.Criteria;

import android.location.Location;

import android.location.LocationListener;

import android.location.LocationManager;

import android.os.Bundle;

import android.webkit.WebView;

import android.widget.Toast;

public class FindGroceryActivity extends Activity implements LocationListener {

private WebView webView;

private LocationManager locationManager;

private String provider;

int lat;

int lng;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_find\_grocery);

webView = (WebView) findViewById(R.id.webViewFindGrocery);

webView.getSettings().setJavaScriptEnabled(true);

// Get the location manager

locationManager = (LocationManager) getSystemService(Context.LOCATION\_SERVICE);

// Define the criteria how to select the location provider -> use

// default

Criteria criteria = new Criteria();

List<String> providers = locationManager.getProviders(true);

for(String provider : providers) {

System.out.println("Provider available: " + provider);

}

provider = locationManager.getBestProvider(criteria, false);

Location location = locationManager.getLastKnownLocation(provider);

// Initialize the location fields

if (location != null) {

System.out.println("Provider " + provider + " has been selected.");

onLocationChanged(location);

} else {

System.out.println("Location Unavailable");

}

webView.loadUrl("https://maps.google.com/?q=Grocery+Store&center=" + lat + "," + lng);

}

@Override

public void onLocationChanged(Location location) {

lat = (int) (location.getLatitude());

lng = (int) (location.getLongitude());

System.out.println("Lat: " + lat + " Long: " + lng);

}

@Override

public void onStatusChanged(String provider, int status, Bundle extras) {

// TODO Auto-generated method stub

}

@Override

public void onProviderEnabled(String provider) {

Toast.makeText(this, "Enabled new provider " + provider,

Toast.LENGTH\_SHORT).show();

}

@Override

public void onProviderDisabled(String provider) {

Toast.makeText(this, "Disabled provider " + provider,

Toast.LENGTH\_SHORT).show();

}

/\* Request updates at startup \*/

@Override

protected void onResume() {

super.onResume();

locationManager.requestLocationUpdates(provider, 400, 1, this);

}

/\* Remove the locationlistener updates when Activity is paused \*/

@Override

protected void onPause() {

super.onPause();

locationManager.removeUpdates(this);

}

}

### CurateRecipeActivity.java

package com.umkc.sg11.grocerybuddy;

import android.app.Activity;

import android.app.AlertDialog;

import android.content.ContentValues;

import android.content.DialogInterface;

import android.content.DialogInterface.OnClickListener;

import android.database.Cursor;

import android.database.SQLException;

import android.database.sqlite.SQLiteDatabase;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

import com.umkc.sg11.grocerybuddy.RecipeContract.RecipeEntry;

public class CurateRecipeActivity extends Activity {

RecipeDbHelper mDbHelper = new RecipeDbHelper(this);

SQLiteDatabase db;

EditText editTitle;

EditText editIngredients;

EditText editDirections;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_curate\_recipe);

editTitle = (EditText) findViewById(R.id.editTextTitle);

editIngredients = (EditText) findViewById(R.id.editTextIngredients);

editDirections = (EditText) findViewById(R.id.editTextDirections);

db = mDbHelper.getWritableDatabase();

}

/\*\* Called when the user clicks the Add Recipe button \*/

public void insertRecipe(View view) {

String title = editTitle.getText().toString().trim();

String ingredients = editIngredients.getText().toString().trim();

String directions = editDirections.getText().toString().trim();

if (title.isEmpty() || ingredients.isEmpty() || directions.isEmpty()) {

createDialog("Input Error", "All of the fields are required!");

return;

}

// Create a new map of values, where column names are the keys

ContentValues values = new ContentValues();

values.put(RecipeEntry.COLUMN\_NAME\_TITLE, title);

values.put(RecipeEntry.COLUMN\_NAME\_INGREDIENTS, ingredients);

values.put(RecipeEntry.COLUMN\_NAME\_DIRECTIONS, directions);

// Insert the new row, returning the primary key value of the new row

try {

db.insertOrThrow(RecipeEntry.TABLE\_NAME, null, values);

} catch(SQLException e) {

if (e.getMessage().contains("unique")) {

createDialog("Insert Error", "A Recipe with this name already exists");

} else {

createDialog("Insert Error", "Error saving Recipe!");

}

return;

}

System.out.println("Inserting Recipe");

createDialog("Saved a Recipe", "Added " + title);

clearRecipe(this.getCurrentFocus());

}

/\*\* Called when the user clicks the Find Recipe button \*/

public void findRecipe(View view) {

String title = editTitle.getText().toString().trim();

if (title.isEmpty()) {

createDialog("Input Error", "Please provide a recipe to search for");

return;

}

// Define a projection that specifies which columns from the database

// you will actually use after this query.

String[] projection = {

RecipeEntry.COLUMN\_NAME\_TITLE,

RecipeEntry.COLUMN\_NAME\_INGREDIENTS,

RecipeEntry.COLUMN\_NAME\_DIRECTIONS,

};

String selection = RecipeEntry.COLUMN\_NAME\_TITLE + "=?";

String[] selectionArgs = {title};

// How you want the results sorted in the resulting Cursor

String sortOrder = RecipeEntry.\_ID;

Cursor cursor = db.query(

RecipeEntry.TABLE\_NAME, // The table to query

projection, // The columns to return

selection, // The columns for the WHERE clause

selectionArgs, // The values for the WHERE clause

null, // don't group the rows

null, // don't filter by row groups

sortOrder // The sort order

);

boolean found = cursor.moveToFirst();

if (found) {

String ingredients = cursor.getString(

cursor.getColumnIndexOrThrow(RecipeEntry.COLUMN\_NAME\_INGREDIENTS));

String directions = cursor.getString(

cursor.getColumnIndexOrThrow(RecipeEntry.COLUMN\_NAME\_DIRECTIONS));

editIngredients.setText(ingredients);

editDirections.setText(directions);

} else {

clearRecipe(this.getCurrentFocus());

editTitle.setText(title);

createDialog("No Recipe Found", "Could not find " + title);

}

}

/\*\* Called when the user clicks the Delete Recipe button \*/

public void deleteRecipe(View view) {

String title = editTitle.getText().toString().trim();

if (title.isEmpty()) {

createDialog("Input Error", "Please provide a recipe to delete");

return;

}

// 1. Instantiate an AlertDialog.Builder with its constructor

AlertDialog.Builder builder = new AlertDialog.Builder(this);

// 2. Chain together various setter methods to set the dialog characteristics

builder.setTitle("Delete Recipe")

.setMessage("Are you sure you want to delete " + title + "?");

// Add the buttons

builder.setPositiveButton("Ok", new DeleteListener(this.getCurrentFocus()));

builder.setNegativeButton("Cancel", new DialogInterface.OnClickListener() {

public void onClick(DialogInterface dialog, int id) {

// User cancelled the dialog

}

});

// 3. Get the AlertDialog from create()

AlertDialog dialog = builder.create();

// 4. Display the Dialog

dialog.show();

}

public void clearRecipe(View view) {

editTitle.setText("");

editIngredients.setText("");

editDirections.setText("");

}

private void createDialog(String title, String message) {

// 1. Instantiate an AlertDialog.Builder with its constructor

AlertDialog.Builder builder = new AlertDialog.Builder(this);

// 2. Chain together various setter methods to set the dialog characteristics

builder.setTitle(title).setMessage(message).setPositiveButton("Ok", null);

// 3. Get the AlertDialog from create()

AlertDialog dialog = builder.create();

// 4. Display the Dialog

dialog.show();

}

private class DeleteListener implements OnClickListener {

String title = editTitle.getText().toString().trim();

String selection = RecipeEntry.COLUMN\_NAME\_TITLE + "=?";

String[] selectionArgs = {title};

View view;

DeleteListener(View v) {

view = v;

}

@Override

public void onClick(DialogInterface dialog, int which) {

int delCount = db.delete(RecipeEntry.TABLE\_NAME, selection, selectionArgs);

if (delCount == 0) {

createDialog("Delete Error", "Could not delete " + title);

} else {

createDialog("Delete Successful", "Deleted " + title);

clearRecipe(view);

}

}

}

}

### RecipeContract.java

package com.umkc.sg11.grocerybuddy;

import android.content.Context;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

import android.provider.BaseColumns;

public final class RecipeContract {

// To prevent someone from accidentally instantiating the contract class,

// give it an empty constructor.

RecipeContract() {}

/\* Inner class that defines the table contents \*/

public static abstract class RecipeEntry implements BaseColumns {

public static final String TABLE\_NAME = "recipes";

public static final String COLUMN\_NAME\_TITLE = "title";

public static final String COLUMN\_NAME\_INGREDIENTS = "ingredients";

public static final String COLUMN\_NAME\_DIRECTIONS = "directions";

}

}

### RecipeDbHelper.java

package com.umkc.sg11.grocerybuddy;

import android.content.Context;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

import com.umkc.sg11.grocerybuddy.RecipeContract.RecipeEntry;

public class RecipeDbHelper extends SQLiteOpenHelper {

private static final String TEXT\_TYPE = " TEXT";

private static final String COMMA\_SEP = ",";

private static final String SQL\_CREATE\_RECIPES =

"CREATE TABLE " + RecipeEntry.TABLE\_NAME + " (" +

RecipeEntry.\_ID + " INTEGER PRIMARY KEY," +

RecipeEntry.COLUMN\_NAME\_TITLE + TEXT\_TYPE + " UNIQUE" + COMMA\_SEP +

RecipeEntry.COLUMN\_NAME\_INGREDIENTS + TEXT\_TYPE + COMMA\_SEP +

RecipeEntry.COLUMN\_NAME\_DIRECTIONS + TEXT\_TYPE +

" )";

private static final String SQL\_DELETE\_RECIPES =

"DROP TABLE IF EXISTS " + RecipeEntry.TABLE\_NAME;

// If you change the database schema, you must increment the database version.

public static final int DATABASE\_VERSION = 1;

public static final String DATABASE\_NAME = "Recipe.db";

public RecipeDbHelper(Context context) {

super(context, DATABASE\_NAME, null, DATABASE\_VERSION);

}

public void onCreate(SQLiteDatabase db) {

db.execSQL(SQL\_CREATE\_RECIPES);

}

public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {

// first version

}

}

## Android XML Code

### AndroidMainfest.xml

<?xml version=*"1.0"* encoding=*"utf-8"*?>

<manifest xmlns:android=*"http://schemas.android.com/apk/res/android"*

package=*"com.umkc.sg11.grocerybuddy"*

android:versionCode=*"1"*

android:versionName=*"1.0"* >

<uses-sdk

android:minSdkVersion=*"9"*

android:targetSdkVersion=*"19"* />

<uses-permission android:name=*"android.permission.INTERNET"* />

<uses-permission android:name=*"android.permission.ACCESS\_COARSE\_LOCATION"* />

<uses-permission android:name=*"android.permission.ACCESS\_FINE\_LOCATION"* />

<application

android:allowBackup=*"true"*

android:icon=*"@drawable/ic\_launcher"*

android:label=*"@string/app\_name"*

android:theme=*"@style/AppTheme"* >

<activity

android:name=*"com.umkc.sg11.grocerybuddy.MainActivity"*

android:label=*"@string/app\_name"* >

<intent-filter>

<action android:name=*"android.intent.action.MAIN"* />

<category android:name=*"android.intent.category.LAUNCHER"* />

</intent-filter>

</activity>

<activity

android:name=*"com.umkc.sg11.grocerybuddy.FindGroceryActivity"*

android:label=*"@string/title\_activity\_find\_grocery"* >

</activity>

<activity

android:name=*"com.umkc.sg11.grocerybuddy.CurateRecipeActivity"*

android:label=*"@string/title\_activity\_curate\_recipe"* >

</activity>

</application>

</manifest>

### activity\_main.xml

<RelativeLayout xmlns:android=*"http://schemas.android.com/apk/res/android"*

xmlns:tools=*"http://schemas.android.com/tools"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"match\_parent"*

tools:context=*"${packageName}.${activityClass}"* >

<Button

android:id=*"@+id/button1"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"wrap\_content"*

android:layout\_alignParentLeft=*"true"*

android:layout\_alignParentTop=*"true"*

android:text=*"Find Grocery Store"*

android:onClick=*"findStore"* />

<Button

android:id=*"@+id/button2"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"wrap\_content"*

android:layout\_alignParentLeft=*"true"*

android:layout\_below=*"@+id/button1"*

android:layout\_marginTop=*"50dp"*

android:text=*"Curate Recipes"*

android:onClick=*"curateRecipes"* />

</RelativeLayout>

### activity\_find\_grocery.xml

<RelativeLayout xmlns:android=*"http://schemas.android.com/apk/res/android"*

xmlns:tools=*"http://schemas.android.com/tools"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"match\_parent"*

tools:context=*"${packageName}.${activityClass}"* >

<WebView

android:id=*"@+id/webViewFindGrocery"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"match\_parent"*

android:layout\_alignParentLeft=*"true"*

android:layout\_alignParentTop=*"true"* />

</RelativeLayout>

### activity\_curate\_recipe.xml

<RelativeLayout xmlns:android=*"http://schemas.android.com/apk/res/android"*

xmlns:tools=*"http://schemas.android.com/tools"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"match\_parent"*

tools:context=*"${packageName}.${activityClass}"* >

<TextView

android:id=*"@+id/textView1"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_alignParentLeft=*"true"*

android:layout\_alignParentTop=*"true"*

android:text=*"Recipe:"*

android:textAppearance=*"?android:attr/textAppearanceLarge"* />

<EditText

android:id=*"@+id/editTextTitle"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"wrap\_content"*

android:layout\_alignParentTop=*"true"*

android:layout\_toRightOf=*"@+id/textView1"*

android:ems=*"10"*

android:hint=*"Title"* />

<EditText

android:id=*"@+id/editTextIngredients"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_above=*"@+id/textView2"*

android:layout\_alignParentLeft=*"true"*

android:layout\_alignParentRight=*"true"*

android:layout\_below=*"@+id/TextView01"*

android:ems=*"10"*

android:inputType=*"textMultiLine"*

android:singleLine=*"false"*

android:hint=*"Ingredients"* >

<requestFocus />

</EditText>

<Button

android:id=*"@+id/button1"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"wrap\_content"*

android:layout\_alignParentBottom=*"true"*

android:layout\_alignParentLeft=*"true"*

android:text=*"Discover Nutrition"* />

<EditText

android:id=*"@+id/editTextDirections"*

android:layout\_width=*"match\_parent"*

android:layout\_height=*"wrap\_content"*

android:layout\_above=*"@+id/buttonAddRecipe"*

android:layout\_alignParentLeft=*"true"*

android:layout\_below=*"@+id/textView2"*

android:ems=*"10"*

android:inputType=*"textMultiLine"*

android:hint=*"Directions"* />

<TextView

android:id=*"@+id/textView2"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_centerHorizontal=*"true"*

android:layout\_centerVertical=*"true"*

android:text=*" "* />

<TextView

android:id=*"@+id/TextView01"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_below=*"@+id/textView1"*

android:layout\_centerHorizontal=*"true"*

android:text=*" "* />

<Button

android:id=*"@+id/buttonFindRecipe"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_below=*"@+id/editTextDirections"*

android:layout\_toLeftOf=*"@+id/textView2"*

android:onClick=*"findRecipe"*

android:text=*"Find"* />

<Button

android:id=*"@+id/buttonDeleteRecipe"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_above=*"@+id/button1"*

android:layout\_toRightOf=*"@+id/textView2"*

android:onClick=*"deleteRecipe"*

android:text=*"Delete"* />

<Button

android:id=*"@+id/buttonClearRecipe"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_above=*"@+id/button1"*

android:layout\_toRightOf=*"@+id/buttonDeleteRecipe"*

android:onClick=*"clearRecipe"*

android:text=*"Clear"* />

<Button

android:id=*"@+id/buttonAddRecipe"*

android:layout\_width=*"wrap\_content"*

android:layout\_height=*"wrap\_content"*

android:layout\_above=*"@+id/button1"*

android:layout\_toLeftOf=*"@+id/buttonFindRecipe"*

android:onClick=*"insertRecipe"*

android:text=*"Add"* />

</RelativeLayout>

### find\_grocery\_store.xml

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

xmlns:app=*"http://schemas.android.com/apk/res-auto"*

xmlns:tools=*"http://schemas.android.com/tools"*

tools:context=*"com.umkc.sg11.grocerybuddy.FindGroceryStoreActivity"* >

<item

android:id=*"@+id/action\_settings"*

android:orderInCategory=*"100"*

android:title=*"@string/action\_settings"*

app:showAsAction=*"never"*/>

</menu>

### strings.xml

<?xml version=*"1.0"* encoding=*"utf-8"*?>

<resources>

<string name=*"app\_name"*>GroceryBuddy</string>

<string name=*"action\_settings"*>Settings</string>

<string name=*"title\_activity\_find\_grocery"*>Find Grocery Store</string>

<string name=*"title\_activity\_curate\_recipe"*>Curate Recipes</string>

</resources>