## Работа с графическими элементами

### Цель работы

Освоить работу с базовыми визуальными элементами Android Studio и способы организации архитектуры приложения на Android.

### Задание

На основе лабораторных работ «MD1.1 Основные элементы» и «MD2.2 Фильтры намерений» реализуйте приложение «Список дел», состоящее из нескольких экранов. На главном экране реализована навигация по существующим категориям. При переходе на каждую категорию реализовать возможность добавления новых дел.

При оформлении приложения не оставляйте стандартного оформления, поменяйте цвета навигации.

Также поменяйте иконку приложения.

**MainActivity.java**

package com.example.simpleplanner;

import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
  
import java.util.ArrayList;  
  
public class MainActivity extends AppCompatActivity {  
  
 ArrayList<String> myDayToDoList;  
 ArrayList<String> importantsToDoList;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
  
 public void onClick(View view) {  
 Intent intent = new Intent();  
 switch (view.getId()) {  
 case R.id.*myDayButton*:  
 intent = new Intent(this, MyDayActivity.class);  
  
 break;  
 case R.id.*importantsButton*:  
 intent = new Intent(this, ImportantsActivity.class);  
 break;  
 }  
 if (myDayToDoList != null) {  
 intent.putStringArrayListExtra("my\_day", myDayToDoList);  
 }  
 if (importantsToDoList != null) {  
 intent.putStringArrayListExtra("importants", importantsToDoList);  
 }  
 startActivityForResult(intent, 0);  
 }  
  
 @Override  
 protected void onActivityResult(int requestCode, int resultCode, Intent data) {  
 super.onActivityResult(requestCode, resultCode, data);  
 Bundle extras = data.getExtras();  
 if (extras != null) {  
 myDayToDoList = data.getExtras().getStringArrayList("my\_day");  
 importantsToDoList = data.getExtras().getStringArrayList("importants");  
 }  
 }  
}

**ToDoList.java**

package com.example.simpleplanner;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.ArrayAdapter;  
import android.widget.EditText;  
import android.widget.ListView;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import java.util.ArrayList;  
  
public class ToDoList extends AppCompatActivity {  
 int layout = R.layout.activity\_my\_day;  
 int listViewId = R.id.myDayListView;  
 int editTextId = R.id.myDayEditText;  
 String key = "my\_day";  
  
  
 ListView toDoListView;  
 ArrayAdapter toDoListAdapter;  
 ArrayList<String> toDoList = new ArrayList<String>();  
 EditText toDoEditText;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(layout);  
  
 toDoListView = findViewById(listViewId);  
 toDoListAdapter = new ArrayAdapter(this,  
 android.R.layout.simple\_list\_item\_1,  
 toDoList);  
 toDoListView.setAdapter(toDoListAdapter);  
 loadToDos();  
 toDoEditText = findViewById(editTextId);  
  
 setResult(RESULT\_OK, getIntent());  
 }  
  
 public void onClick (View view) {  
 String item = toDoEditText.getText().toString();  
 toDoList.add(item);  
 toDoListAdapter.notifyDataSetChanged();  
 Intent intent = getIntent();  
 intent.putStringArrayListExtra(key, toDoList);  
 }  
  
 private void loadToDos() {  
 Bundle extras = getIntent().getExtras();  
 if (extras != null) {  
 ArrayList<String> items = extras.getStringArrayList(key);  
 if (items != null) {  
 for (String item : items) {  
 toDoList.add(item);  
 }  
 }  
 }  
 toDoListAdapter.notifyDataSetChanged();  
 }  
  
}

**MyDayActivity.java**

package com.example.simpleplanner;  
  
public class MyDayActivity extends ToDoList {  
  
}

**ImportantsActivity.java**

package com.example.simpleplanner;  
  
import android.os.Bundle;  
  
public class ImportantsActivity extends ToDoList {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 layout = R.layout.*activity\_importants*;  
 listViewId = R.id.*importantsListView*;  
 editTextId = R.id.*importantsEditText*;  
 key = "importants";  
  
 super.onCreate(savedInstanceState);  
 }  
}

**colors.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<resources>  
 <color name="black">#FF000000</color>  
 <color name="white">#FFFFFFFF</color>  
  
 <color name="green">#1B5E20</color>  
 <color name="green\_dark">#003300</color>  
 <color name="green\_light">#A5D6A7</color>  
 <color name="blue">#0288D1</color>  
 <color name="blue\_dark">#005B9F</color>  
 <color name="blue\_light">#81D4FA</color>  
</resources>

**strings.xml**

<resources>  
 <string name="app\_name">Список дел</string>  
</resources>

**styles.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<resources>  
 <style name="header">  
 <item name="android:layout\_width">wrap\_content</item>  
 <item name="android:layout\_height">wrap\_content</item>  
 <item name="android:layout\_marginTop">20dp</item>  
 <item name="android:textSize">20sp</item>  
 </style>  
  
 <style name="todo\_list">  
 <item name="android:layout\_width">wrap\_content</item>  
 <item name="android:layout\_height">400dp</item>  
 <item name="android:layout\_marginTop">20dp</item>  
 </style>  
  
 <style name="todo\_edit\_text">  
 <item name="android:layout\_width">wrap\_content</item>  
 <item name="android:layout\_height">wrap\_content</item>  
 <item name="android:ems">10</item>  
 </style>  
  
 <style name="todo\_add\_button">  
 <item name="android:layout\_width">wrap\_content</item>  
 <item name="android:layout\_height">wrap\_content</item>  
 <item name="android:text">Добавить</item>  
 <item name="android:onClick">onClick</item>  
 </style>  
</resources>

**activity\_main.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout 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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/myDayButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Мой день"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 android:onClick="onClick"/>  
  
 <Button  
 android:id="@+id/importantsButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:onClick="onClick"  
 android:text="Важные"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.581" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**activity\_my\_day.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout 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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MyDayActivity">  
  
 <TextView  
 android:id="@+id/header"  
 style="@style/header"  
 android:text="Дела на сегодня"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ListView  
 android:id="@+id/myDayListView"  
 style="@style/todo\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="400dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/header" >  
  
 </ListView>  
  
 <EditText  
 style="@style/todo\_edit\_text"  
 android:id="@+id/myDayEditText"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/myDayListView" />  
  
 <Button  
 style="@style/todo\_add\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/myDayEditText" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

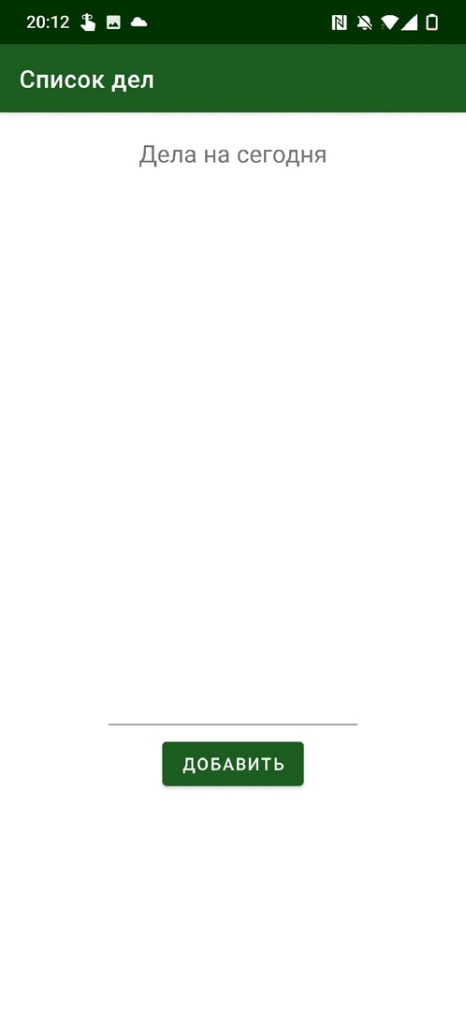
**activity\_my\_day.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout 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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MyDayActivity">  
  
 <TextView  
 android:id="@+id/header"  
 style="@style/header"  
 android:text="Дела на сегодня"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ListView  
 android:id="@+id/myDayListView"  
 style="@style/todo\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="400dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/header" >  
  
 </ListView>  
  
 <EditText  
 style="@style/todo\_edit\_text"  
 android:id="@+id/myDayEditText"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/myDayListView" />  
  
 <Button  
 style="@style/todo\_add\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/myDayEditText" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**activity\_importants.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout  
 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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".ImportantsActivity">  
  
 <TextView  
 android:id="@+id/header"  
 style="@style/header"  
 android:text="Важные дела"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ListView  
 android:id="@+id/importantsListView"  
 style="@style/todo\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="400dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/header" >  
  
 </ListView>  
  
 <EditText  
 style="@style/todo\_edit\_text"  
 android:id="@+id/importantsEditText"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/importantsListView" />  
  
 <Button  
 style="@style/todo\_add\_button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/importantsEditText" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>







Изображение выглядит как текст

Автоматически созданное описание

