**实 验 报 告**

**课程名称：** 移动应用开发

**学 院： 计算机科学与工程学院**

**专 业：** 计算机科学与技术 **班 级： 18-4**

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**山 东 科 技 大 学 教 务 处 制**

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| **组 别** |  | **姓 名** | **徐兴乐** | **同组实验者** |  |
| **实验项目**  **名称** | **Activity** | | **实验日期** | **2020/12/2** | |
| **教师评语** |  | | | | |
| **实验成绩：** | | | **指导教师（签名）：**  **年 月 日** | | |
| **一、实验目的：**  1、熟练掌握基于UI控件、布局、Activity等技术的Android APP的界面实现技术，以及基于Android Studio的APP UI实现方法。**二、实验内容：**  1、实现显示商品列表的APP界面。  1）实现商品列表的滑动，并显示商品的简介，价格，缩略图。  2）点击一个商品后，可以显示商品详情。  3）可以滑动屏幕查看商品多方位展示图  4）点击“免费购买”按钮，显示购买成功，点击“返回列表”，返回商品主列表。  系统界面展示：      **三、核心代码：**  主页面代码：  public class MainActivity extends AppCompatActivity {   private String[] data = {"王小卤虎皮凤爪 网红零食 虎皮鸡爪小零食 卤味卤香五香麻辣香辣 虎皮凤爪卤香味200g\*2袋",  "三只松鼠手撕面包 饼干蛋糕千糕点零食酵母面包代餐早餐口袋软面包礼盒 1000g/盒",  "三只松鼠乳酸菌小伴侣面包 营养早餐代餐口袋手撕面包网红零食饼干生日蛋糕糕点520g/箱",  "百草味 网红休闲零食特色小吃美食整箱蛋糕早餐手撕面包点心传统糕点 原味肉松饼1000g/箱",  "三只松鼠每日坚果 750g/30袋 儿童孕妇零食节日大礼包送女友混合干果节日礼盒腰果葡萄干核桃仁开心果"};  private String[] data2 = {"¥49.80","¥32.90","¥28.90","¥34.90","¥149.00"};  private List<Goods> goodsList = new ArrayList<>();  @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  setContentView(R.layout.*activity\_main*);  initGoods();  GoodsAdapter adapter = new GoodsAdapter(MainActivity.this,R.layout.*goods\_item*,goodsList);  ListView listView = (ListView) findViewById(R.id.*shop\_view*);  listView.setAdapter(adapter);  listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {  @Override  public void onItemClick(AdapterView<?> parent, View view, int position, long id) {  Intent intent = new Intent(MainActivity.this,DetailsActivity.class);  intent.putExtra("id",position);  startActivity(intent);  }  });  }  private void initGoods(){  for(int i = 0;i<2;i++){  Goods meat = new Goods(data[0],data2[0],R.drawable.*meat*);  goodsList.add(meat);  Goods bread1 = new Goods(data[1],data2[1],R.drawable.*bread1*);  goodsList.add(bread1);  Goods bread2 = new Goods(data[2],data2[2],R.drawable.*bread2*);  goodsList.add(bread2);  Goods cake = new Goods(data[3],data2[3],R.drawable.*cake*);  goodsList.add(cake);  Goods nut = new Goods(data[4],data2[4],R.drawable.*nut*);  goodsList.add(nut);  }  } }  主页面布局：  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  >   <ListView  android:id="@+id/shop\_view"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"/>  </LinearLayout>  商品类：  public class Goods {  private String name;  private String price;  private int imageId;   public Goods(String name, String price, int imageId) {  this.name = name;  this.price = price;  this.imageId = imageId;  }   public String getName() {  return name;  }   public int getImageId() {  return imageId;  }   public String getPrice() {  return price;  }  }  Listview配置类  public class GoodsAdapter extends ArrayAdapter<Goods> {  private int resourceId;   public GoodsAdapter(@NonNull Context context, int resourceId, @NonNull List<Goods> objects) {  super(context, resourceId, objects);  this.resourceId = resourceId;  }   public View getView(int position, View convertView, ViewGroup parent){  Goods goods = getItem(position);  View view;  ViewHolder viewHolder;  if(convertView == null){  view = LayoutInflater.*from*(getContext()).inflate(resourceId,parent,false);  viewHolder = new ViewHolder();  viewHolder.goodsImage = (ImageView) view .findViewById(R.id.*goods\_image*);  viewHolder.goodsName = (TextView) view.findViewById(R.id.*goods\_name*);  viewHolder.goodsPrice = (TextView) view.findViewById(R.id.*goods\_price*);  view.setTag(viewHolder);  }  else{  view = convertView;  viewHolder = (ViewHolder) view.getTag();  }  viewHolder.goodsImage.setImageResource(goods.getImageId());  viewHolder.goodsName.setText(goods.getName());  viewHolder.goodsPrice.setText(goods.getPrice());  return view;  }  class ViewHolder{  ImageView goodsImage;  TextView goodsName;  TextView goodsPrice;  }  }  详情界面：  public class DetailsActivity extends AppCompatActivity {  private TextView tev,tep;  private int id;  private List<Goods> goodsList2 = new ArrayList<>();  private int[] photo = new int[]{  R.drawable.*meat*,R.drawable.*meat1*,R.drawable.*meat2*,R.drawable.*meat3* };  private String[] data = {"王小卤虎皮凤爪 网红零食 虎皮鸡爪小零食 卤味卤香五香麻辣香辣 虎皮凤爪卤香味200g\*2袋",  "三只松鼠手撕面包 饼干蛋糕千糕点零食酵母面包代餐早餐口袋软面包礼盒 1000g/盒",  "三只松鼠乳酸菌小伴侣面包 营养早餐代餐口袋手撕面包网红零食饼干生日蛋糕糕点520g/箱",  "百草味 网红休闲零食特色小吃美食整箱蛋糕早餐手撕面包点心传统糕点 原味肉松饼1000g/箱",  "三只松鼠每日坚果 750g/30袋 儿童孕妇零食节日大礼包送女友混合干果节日礼盒腰果葡萄干核桃仁开心果"};  private String[] data2 = {"¥49.80","¥32.90","¥28.90","¥34.90","¥149.00"};  @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  setContentView(R.layout.*details\_layout*);  Intent intent = getIntent();  id = intent.getIntExtra("id",0);  tev = findViewById(R.id.*meat\_d*);  tep = findViewById(R.id.*meat\_p*);  Button buy1 = findViewById(R.id.*buy1*);  Button buy2 = findViewById(R.id.*buy2*);  buy1.setOnClickListener(new View.OnClickListener() {  @Override  public void onClick(View v) {  Toast.*makeText*(DetailsActivity.this,"购买成功！",Toast.*LENGTH\_SHORT*).show();  }  });  buy2.setOnClickListener(new View.OnClickListener() {  @Override  public void onClick(View v) {  finish();  }  });  init();  RecyclerView recyclerView = findViewById(R.id.*re1*);  LinearLayoutManager layoutManager = new LinearLayoutManager(this);  layoutManager.setOrientation(LinearLayoutManager.*HORIZONTAL*);  recyclerView.setLayoutManager((layoutManager));  GoodsAdapter2 adapter = new GoodsAdapter2(goodsList2);  recyclerView.setAdapter(adapter);  }  private void init() {  if(id%5==0){  Goods k1 = new Goods("kkmeat","kmeat",R.drawable.*meat*);  goodsList2.add(k1);  Goods k2 = new Goods("kkmeat","kmeat",R.drawable.*meat1*);  goodsList2.add(k2);  Goods k3 = new Goods("kkmeat","kmeat",R.drawable.*meat2*);  goodsList2.add(k3);  Goods k4 = new Goods("kkmeat","kmeat",R.drawable.*meat3*);  goodsList2.add(k4);  tev.setText(data[0]);  tep.setText(data2[0]);  }  else if(id%5==1){  Goods k1 = new Goods("kkmeat","kmeat",R.drawable.*bread1*);  goodsList2.add(k1);  Goods k2 = new Goods("kkmeat","kmeat",R.drawable.*bread11*);  goodsList2.add(k2);  Goods k3 = new Goods("kkmeat","kmeat",R.drawable.*bread12*);  goodsList2.add(k3);  Goods k4 = new Goods("kkmeat","kmeat",R.drawable.*bread13*);  goodsList2.add(k4);  tev.setText(data[1]);  tep.setText(data2[1]);  }  else if(id%5==2){  Goods k1 = new Goods("kkmeat","kmeat",R.drawable.*bread2*);  goodsList2.add(k1);  Goods k2 = new Goods("kkmeat","kmeat",R.drawable.*bread21*);  goodsList2.add(k2);  Goods k3 = new Goods("kkmeat","kmeat",R.drawable.*bread22*);  goodsList2.add(k3);  Goods k4 = new Goods("kkmeat","kmeat",R.drawable.*bread23*);  goodsList2.add(k4);  tev.setText(data[2]);  tep.setText(data2[2]);  }  else if(id%5==3){  Goods k1 = new Goods("kkmeat","kmeat",R.drawable.*cake*);  goodsList2.add(k1);  Goods k2 = new Goods("kkmeat","kmeat",R.drawable.*cake1*);  goodsList2.add(k2);  Goods k3 = new Goods("kkmeat","kmeat",R.drawable.*cake2*);  goodsList2.add(k3);  Goods k4 = new Goods("kkmeat","kmeat",R.drawable.*cake3*);  goodsList2.add(k4);  tev.setText(data[3]);  tep.setText(data2[3]);  }  else if(id%5==4){  Goods k1 = new Goods("kkmeat","kmeat",R.drawable.*nut*);  goodsList2.add(k1);  Goods k2 = new Goods("kkmeat","kmeat",R.drawable.*nut1*);  goodsList2.add(k2);  Goods k3 = new Goods("kkmeat","kmeat",R.drawable.*nut2*);  goodsList2.add(k3);  Goods k4 = new Goods("kkmeat","kmeat",R.drawable.*nut3*);  goodsList2.add(k4);  tev.setText(data[4]);  tep.setText(data2[4]);  }  }  详情页面布局：  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent">  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="200dp">  <androidx.recyclerview.widget.RecyclerView  android:id="@+id/re1"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"/>  </LinearLayout>  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="200dp">  <TextView  android:id="@+id/meat\_d"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginTop="20dp"  android:textSize="25dp"  android:textColor="#000000" />  <TextView  android:id="@+id/meat\_p"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:layout\_marginRight="10dp"  android:layout\_marginTop="10dp"  android:textColor="#ff0000"  android:textSize="25dp" />  </LinearLayout>   <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="horizontal"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent">  <Button  android:id="@+id/buy1"  android:layout\_marginTop="140dp"  android:layout\_marginLeft="40dp"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:background="@android:color/holo\_orange\_dark"  android:text="免费购买"/>  <Button  android:id="@+id/buy2"  android:layout\_marginTop="140dp"  android:layout\_marginLeft="150dp"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:background="@android:color/holo\_purple"  android:text="返回列表"/>  </LinearLayout> </LinearLayout>  RecyclerView配置类  public class GoodsAdapter2 extends RecyclerView.Adapter<GoodsAdapter2.ViewHolder> {   private List<Goods> mGoodsList;  static class ViewHolder extends RecyclerView.ViewHolder{  ImageView goodsImage2;  public ViewHolder(View view){  super(view);  goodsImage2 = view.findViewById(R.id.*goodsimage2*);  }  }  public GoodsAdapter2(List<Goods> goods){  mGoodsList = goods;  }  @NonNull  @Override  public GoodsAdapter2.ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  View view = LayoutInflater.*from*(parent.getContext())  .inflate(R.layout.*goods\_adapter2*,parent,false);  ViewHolder holder = new ViewHolder(view);  return holder;  }   public void onBindViewHolder(ViewHolder holder,int position){  Goods goods = mGoodsList.get(position);  System.*out*.println(position);  holder.goodsImage2.setImageResource(goods.getImageId());  }   @Override  public int getItemCount() {  return mGoodsList.size();  } } | | | | | |