**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** | **Fragment** | | **实验日期** | **2020/12/9** | |
| **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Fragment的Android APP的界面实现技术。  **二、实验内容：**  1、在实验2实现的APP的基础上，使用Fragment使得APP能够据不同分辨率的单屏或双屏模式。  系统界面展示：  双屏模式：      单屏模式：    **三、核心代码：**  主页面代码：  public class MainActivity extends AppCompatActivity {   @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  setContentView(R.layout.*activity\_main*);  } }  主页面布局：  单屏模式：  <fragment  android:id="@+id/news\_title\_fragment"  android:name="com.example.test3.NewsTitleFragment"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"/>  双屏模式：  <fragment  android:id="@+id/news\_title\_fragment"  android:name="com.example.test3.NewsTitleFragment"  android:layout\_width="0dp"  android:layout\_height="match\_parent"  android:layout\_weight="2"/> <FrameLayout  android:id="@+id/news\_content\_layout"  android:layout\_width="0dp"  android:layout\_height="match\_parent"  android:layout\_weight="3">  <fragment  android:id="@+id/news\_content\_fragment"  android:name="com.example.test3.NewsContentFragment"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"/> </FrameLayout>  左侧界面（单屏模式下第一页面）：  public class NewsTitleFragment extends Fragment {  private boolean isTwopage;  public View onCreateView(LayoutInflater inflater, ViewGroup container,  Bundle savedInstance){  View view = inflater.inflate(R.layout.*new\_title\_frag*,container,false);  RecyclerView newsTitleRecyclerView = (RecyclerView) view.  findViewById(R.id.*news\_title\_recycler\_view*);  LinearLayoutManager layoutManager = new LinearLayoutManager(getActivity());  newsTitleRecyclerView.setLayoutManager(layoutManager);  NewsAdapter adapter = new NewsAdapter(getNews());  newsTitleRecyclerView.setAdapter(adapter);  return view;  }  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<News>getNews(){  List<News> newsList = new ArrayList<>();   for(int i = 0;i<10;i++){  News news = new News();  news.setTitle(data[i%5]);  news.setContent(data2[i%5]);  news.setId(i%5);  newsList.add(news);  }  return newsList;  }   public void onActivityCreated(Bundle savedInstance){  super.onActivityCreated(savedInstance);  if(getActivity().findViewById(R.id.*news\_content\_fragment*)!=null){  isTwopage = true;  }  else{  isTwopage = false;  }  }  class NewsAdapter extends RecyclerView.Adapter<NewsAdapter.ViewHolder>{  private List<News> mNewsList;  class ViewHolder extends RecyclerView.ViewHolder{   TextView newsTitleText;  TextView des;  ImageView tmp;  public ViewHolder(View view){  super(view);  newsTitleText = (TextView) view.findViewById(R.id.*goods\_name*);  des = view.findViewById(R.id.*goods\_price*);  tmp = view.findViewById(R.id.*goods\_image*);  }  }  public NewsAdapter(List<News> newsList){  mNewsList = newsList;  }   @NonNull  @Override  public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {  View view = LayoutInflater.*from*(parent.getContext())  .inflate(R.layout.*news\_item*,parent,false);  final ViewHolder holder = new ViewHolder(view);  view.setOnClickListener(new View.OnClickListener(){  public void onClick(View v){  News news = mNewsList.get(holder.getAdapterPosition());  if(isTwopage){  NewsContentFragment newsContentFragment =  (NewsContentFragment)getFragmentManager()  .findFragmentById(R.id.*news\_content\_fragment*);  newsContentFragment.refresh(news.getTitle(),news.getContent(),news.getId());  }  else{  NewsContentActivity.*actionStart*(getActivity(),news.getTitle(),news.getContent(),news.getId());  }  }  });  return holder;  }   @Override  public void onBindViewHolder(@NonNull ViewHolder holder, int position) {  News news = mNewsList.get(position);  holder.newsTitleText.setText(news.getTitle());  holder.des.setText(news.getContent());  int id = news.getId();  if(id==0){  holder.tmp.setImageResource(R.drawable.*meat*);  }  else if(id==1){  holder.tmp.setImageResource(R.drawable.*bread1*);  }  else if(id==2){  holder.tmp.setImageResource(R.drawable.*bread2*);  }  else if(id==3){  holder.tmp.setImageResource(R.drawable.*cake*);  }  else if(id==4){  holder.tmp.setImageResource(R.drawable.*nut*);  }  }   @Override  public int getItemCount() {  return mNewsList.size();  }  } }  左侧布局  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent">   <androidx.recyclerview.widget.RecyclerView  android:id="@+id/news\_title\_recycler\_view"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent" />  </LinearLayout>  <?xml version="1.0" encoding="utf-8"?> <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="horizontal"  android:layout\_width="match\_parent"  android:layout\_height="225dp">   <ImageView  android:id="@+id/goods\_image"  android:layout\_width="180dp"  android:layout\_height="200dp"  android:gravity="center\_vertical"  android:layout\_marginRight="10dp"  android:layout\_marginTop="10dp"  android:layout\_marginBottom="10dp"  />  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content">  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content">  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="天猫超市"  android:layout\_marginRight="10dp"  android:layout\_marginTop="10dp"  android:textColor="#ff0000"  android:textSize="15dp" />  <TextView  android:id="@+id/goods\_name"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:textSize="20dp"  android:textColor="#000000" />  </LinearLayout>  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="horizontal"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content">  <TextView  android:id="@+id/goods\_price"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:textColor="#FF0000"  android:layout\_marginTop="10dp"  android:textSize="30dp" />  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="限时价"  android:textColor="#FF0000"  android:textSize="15dp" />  </LinearLayout>  </LinearLayout> </LinearLayout>  右侧界面（单屏模式下第二页面）：  public class NewsContentFragment extends Fragment {  private View view;  public int idx;  private List<Integer>imgid;  public View onCreateView(LayoutInflater inflater, ViewGroup container,  Bundle savedInstance){  view = inflater.inflate(R.layout.*news\_content\_frag*,container,false);  return view;  }  public void refresh(String name,String des,int id){  TextView goodsName = view.findViewById(R.id.*meat\_d*);  TextView goodsDes = view.findViewById(R.id.*meat\_p*);  ImageView tmp = view.findViewById(R.id.*new\_image*);  idx = id;  if(id==0){  tmp.setImageResource(R.drawable.*meat1*);  }  else if(id==1){  tmp.setImageResource(R.drawable.*bread11*);  }  else if(id==2){  tmp.setImageResource(R.drawable.*bread21*);  }  else if(id==3){  tmp.setImageResource(R.drawable.*cake1*);  }  else if(id==4){  tmp.setImageResource(R.drawable.*nut1*);  }  goodsName.setText(name);  goodsDes.setText(des);  }  }  右侧布局  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:orientation="vertical"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent">  <fragment  android:id="@+id/news\_content\_fragment"  android:name="com.example.test3.NewsContentFragment"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"/> </LinearLayout>  <?xml version="1.0" encoding="utf-8"?> <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">  <ImageView  android:id="@+id/new\_image"  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="10dp"  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="10dp"  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> | | | | | |