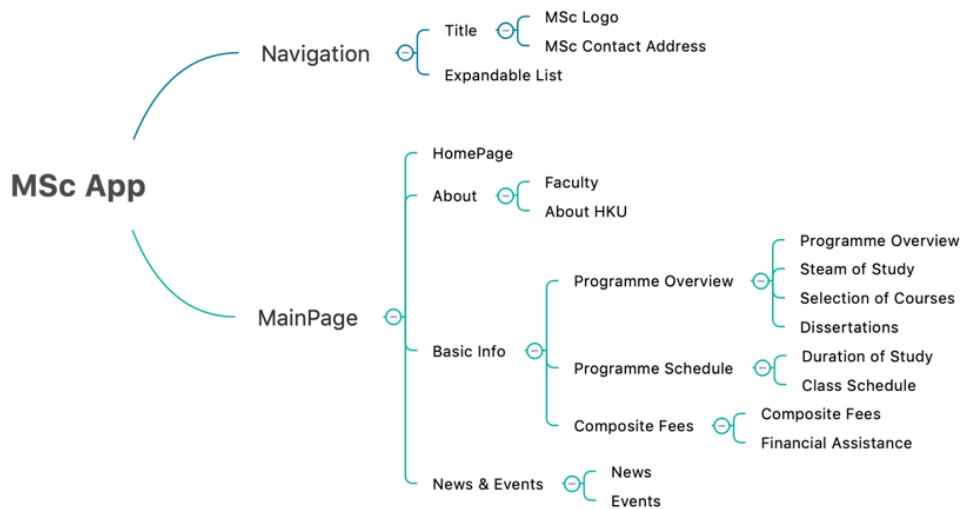


COMP7506 - MScApp

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1 Basic framework



2 Main functions

a) MainActivity.java

The app starts with this activity and set content view to activity_main.xml.

```
private void initNavigationView():
```

Initialize the menu data in expandableListView and populate the expandable list. Set adapter, setOnGroupClickListener and setOnChildClickListener here.

```
private void switchFragment(Fragment targetFragment):
```

Use FragmentManager and FragmentTransaction to switch different fragment.

```
public void goBackView() goForwardView():
```

Provide an interface to child fragments call to switch views.

b) ExpandableListAdapter.java

This is customized list adapter extend BaseExpandableListAdapter, we define different function to get child view or group view data here, like :

```
public long getChildId(int groupPosition, int childPosition)
public View getChildView(int groupPosition, final int childPosition,
                        boolean isLastChild, View convertView, ViewGroup parent)
public int getChildrenCount(int groupPosition)
public MenuModel getGroup(int groupPosition)
...
```

c) FragmentHome.java

This is the fragment of homepage implements AppBarLayout.

```
private void initToolbar(View view) & initAppBarLayout(View view):
```

Bind the toggle icon animation with drawer, add drawer listener. And set appbar offsetChangeListener to change alphaScale according to offset height.

```
private void initConvenientBanner(View view):
```

Use ConvenientBanner and LocalImageView to complete the custom rotation effect with pictures.

```
private void initTextViewClick(View view):
```

Set textView click listener to change fragment view.

d) LocalImageView.java

A custom ViewHolder implements Holder.

e) FragmentAbout.java, FragmentFaculty...FragmentSchedule.java

Different child fragment function, including setting the corresponding view, setting toolbar click listener on icon and initializing view pager with different layout xml files.

f) LoadingView.java A custom loading effect chart and some functions to set its visibility.

g) FragmentNews.java, FragmentEvents.java

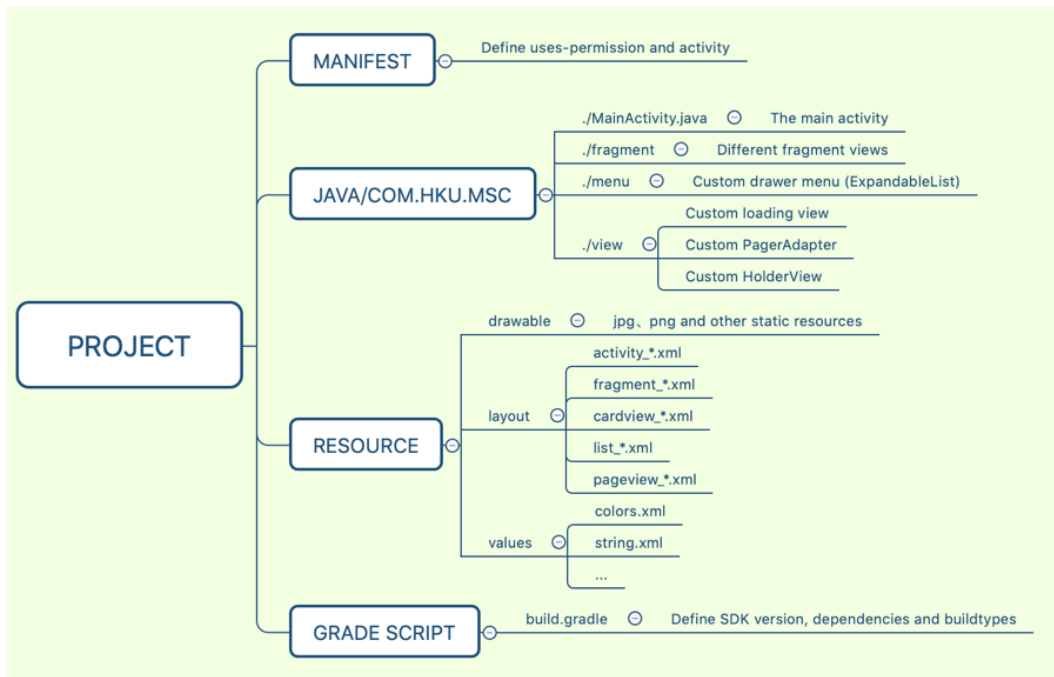
```
private void initNewThread():
```

Start new thread and use Jsoup to get information from website. Then parse HTML doc into required elements and generate different Card View.

```
getActivity().runOnUiThread(new Runnable() {}):
```

Update the application UI by using runOnUiThread(). This will magically cause the Runnable code to get executed on the Main Thread.

3 Project structure



4 Compilation and Execution process

If you want to install the app on your android devices, you need to generate the suitable apk.

Just click Build > Generate Signed APK > app > Create new (sign key) > Next ... > Finish > Reveal the apk in Finder.

5 Contributions

ZHANG Kai	Main activity with layout/main.xml
	Switch fragment functions
	Fragment of homepage, corresponding layout xml file
	Toolbar function and xml, bind toggle icon with drawer listener
	Custom ViewHolder implements Holder, implement automatic scrolling of pictures with ConvenientBann
	Complete the draft documentation, and Readme.md
WANG Dezhaoh	Fragment of basic info (fees, overview, schedule), corresponding layout xml files
	Fragment of about (faculty, about HKU), corresponding layout xml files
	Custom ExpandableListAdapter and MenuModel item, with list_group_child.xml/ list_group_header.xml, generate custom drawer controls
	View pager function, custom pager adapter
	Page view layout files including Programme Overview, Stream of Study, Selection of Courses, Dissertations
YAN Qiangyu	Fragment of news & events, corresponding layout xml files
	Custom loading view
	Custom card view of news and card view of events
	Multi-threaded operation when using Jsoup to scratch message from URL and parse HTML
	Update UI by using UIThread
	Make the video
	Review and complete the final documentation