

CHAPTER 5

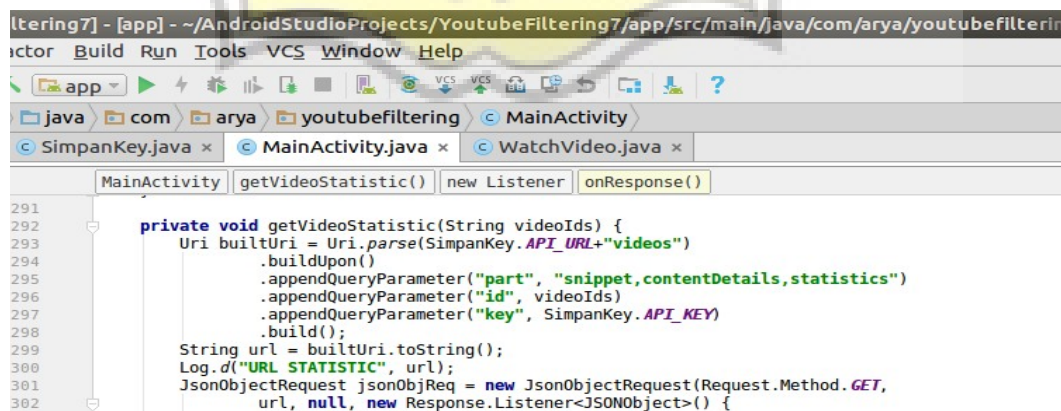
IMPLEMENTATION AND TESTING

5.1 Implementation

This project using Android Studio, and this project need a KEY from Youtube Data API. to get the KEY, need registration at the address <https://console.developers.google.com/>. This KEY serve as the link of the application o retrieve data from Youtube. In this project KEY is saved in the activity “SimpanKey.Java”.

```
1. public class SimpanKey {
2.     public static final String API_URL =
3.     "https://www.googleapis.com/youtube/v3/";
4.     public static final String API_KEY =
5.     "AIzaSyAfuFunAaNxV7KpvnBXoyxqdMNRm_B2nc8";
6. }
```

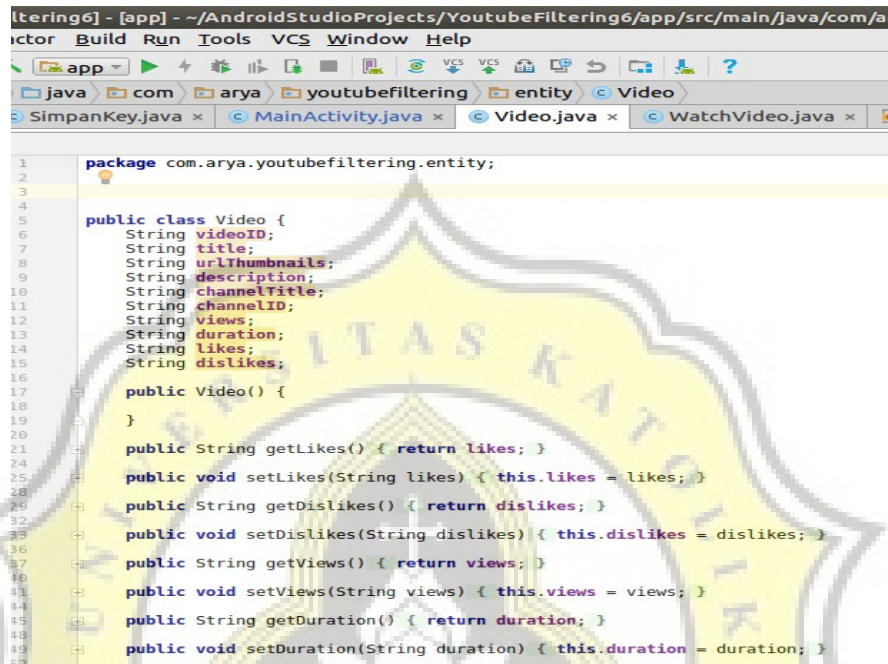
After getting the KEY from Youtube Data API, this project retrieves the data parts in the Youtube Data API, this project need part of snippet, part of contentDetails, and part of statistic. In each part it has its own items, for parts of snippet has title, channelID, and description. For part of contentDetails has viewers, like, unlike. For part of statistic has duration items. The parts is in will keep in activity “MainActivity.java”.



```
291
292 private void getVideoStatistic(String videoIds) {
293     Uri builtUri = Uri.parse(SimpanKey.API_URL+"videos")
294     .buildUpon()
295     .appendQueryParam("part", "snippet,contentDetails,statistics")
296     .appendQueryParam("id", videoIds)
297     .appendQueryParam("key", SimpanKey.API_KEY)
298     .build();
299     String url = builtUri.toString();
300     Log.d("URL STATISTIC", url);
301     JsonObjectRequest jsonObjReq = new JsonObjectRequest(Request.Method.GET,
302     url, null, new Response.Listener<JSONObject>() {
```

Illustration 5.1: MainActivity 1

After the parts was taken, and then make array to this project keep the items into Video.java



```

1 package com.arya.youtubefiltering.entity;
2
3
4
5 public class Video {
6     String videoID;
7     String title;
8     String urlThumbnails;
9     String description;
10    String channelTitle;
11    String views;
12    String duration;
13    String likes;
14    String dislikes;
15
16    public Video() {
17    }
18
19
20    public String getLikes() { return likes; }
21
22    public void setLikes(String likes) { this.likes = likes; }
23
24    public String getDislikes() { return dislikes; }
25
26    public void setDislikes(String dislikes) { this.dislikes = dislikes; }
27
28    public String getViews() { return views; }
29
30    public void setViews(String views) { this.views = views; }
31
32    public String getDuration() { return duration; }
33
34    public void setDuration(String duration) { this.duration = duration; }
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51

```

Illustration 5.2: Video.java

The next step, this project search ID of the category and called ID of the category. ID Category can be around in the <https://developers.google.com/youtube/v3/docs/videoCategories> ID of the Music is 10, ID of the News is 25, and ID of Sport is 17. After get ID of Category the next step is calling ID Category and access ID Category. ID Categories on save and call in the activity "MainActivity.java"

```
27
28
29
30 radioGroup.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
31     @Override
32     public void onCheckedChanged(RadioGroup group, @IdRes int checkedId) {
33         if(checkedId==R.id.music){
34             category = "10";
35         }else if(checkedId==R.id.news){
36             category = "25";
37         }else if(checkedId==R.id.sports){
38             category = "17";
39         }
40     }
41 });
```

Illustration 5.3: Category in MainActivity

To the process of a filter user have to input keyword the title video first in in mButtonSearch and determine years publish videos to in show, after that next to radio button to choose category will be show in in projects there are 3 categories music, news and sport. Next step to spinner an order to user choose or order video that appears based on viewers most or from date, and the last to the switchSearch to turn a filter children that video to a category above 18 + not in show.

5.2 Testing

After the creation of the project was completed, then do the testing project.

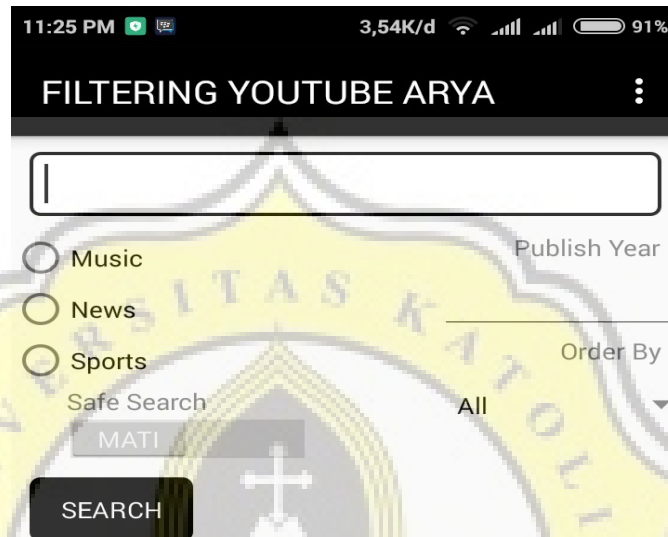


Illustration 5.4: Application view 1

From the picture above is the view of the application page that has not been input by the user. To get videos, user must input first from start title keyword, choose category of music, news or sports, input publish year to get result of video in search.

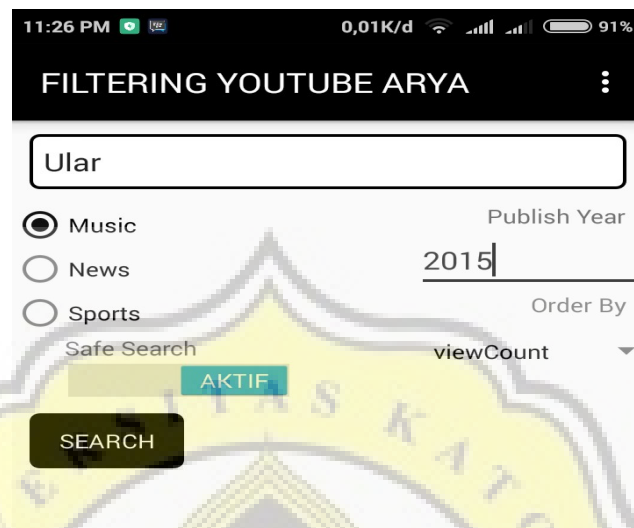


Illustration 5.5: Input Keyword Tittle

In this project the user can input the keyword title, after entering the title of the next step the user can manage the video based on the selected category, ranging from music, sport, and news categories. Then user can also input the publish year of the video that will be on display, and can use order feature to display videos from viewers, and user can also activate Safe Search feature. Safe Search is a feature to filter the age category of 18+, if this feature is enabled then videos that are categorized 18+ will not appear in search results.

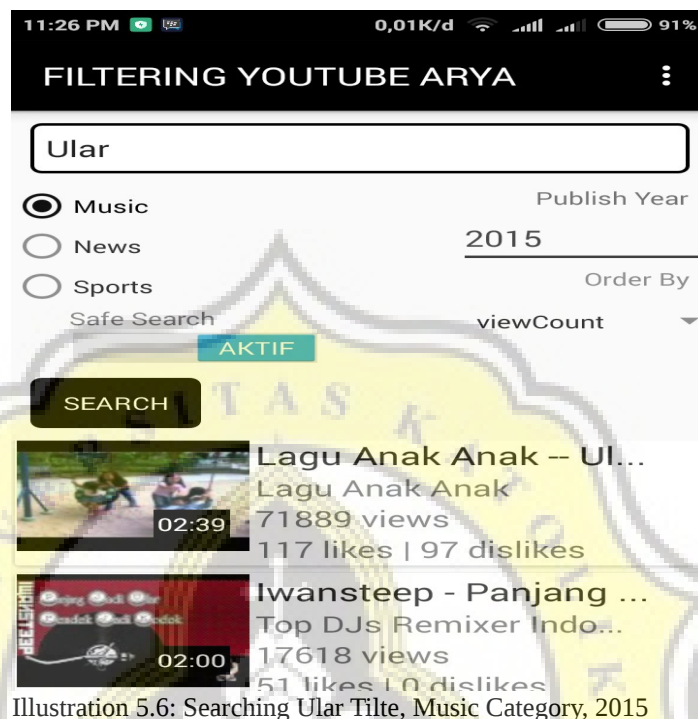


Illustration 5.6: Searching Ular Tilte, Music Category, 2015

In the picture above is the keyword that the input is “Ular” with the Music category and publish year 2015, Safe Search ON, order by viewCount. Then the video that comes out is a video that categorized the music, and video publish year 2015 and at sort of the topmost video with viewers at most and videos with the 18+ category are not displayed.

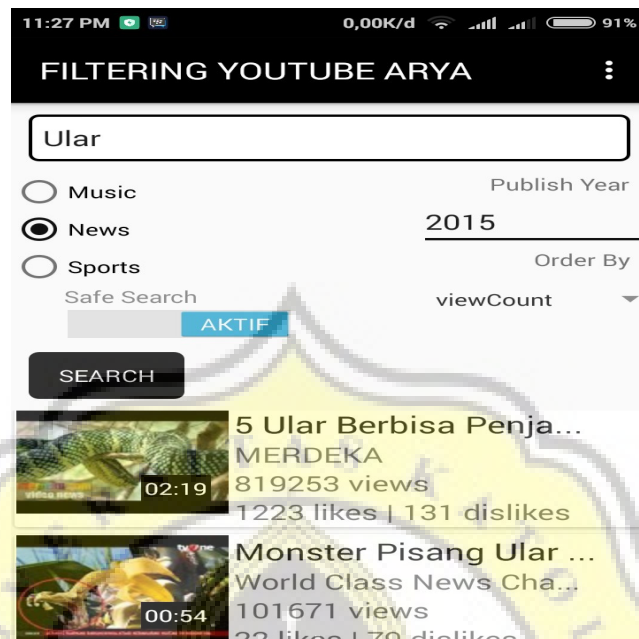


Illustration 5.7: Searching Ular Title, News, 2015

In the picture above is the keyword that the input is “Ular” with the news category and publish year 2015, Safe Search ON, order by viewCount. Then the video that comes out is a video that categorized the news, and video publish year 2015 and at sort of the topmost video with viewers at most and videos with the 18+ category are not displayed.

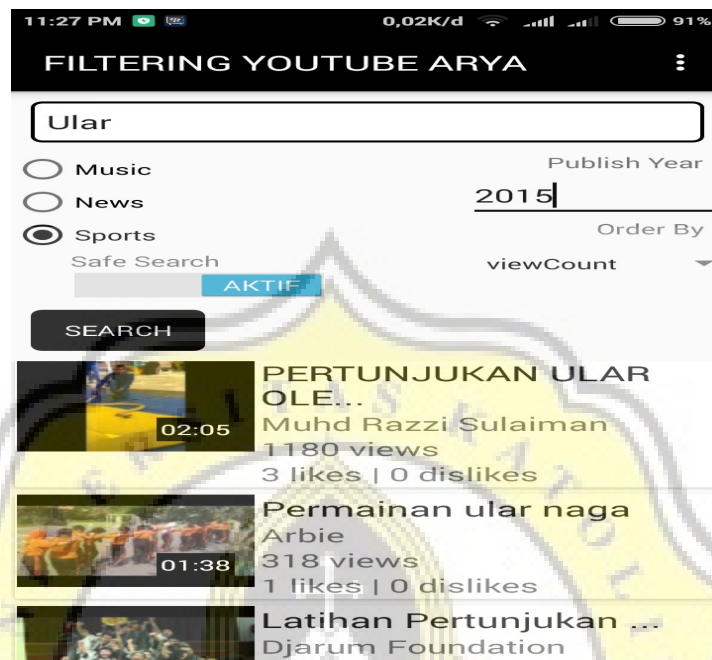


Illustration 5.8: Searching Ular Title, Sport Category, 2015

In the picture above is the keyword that the input is “Ular” with the Sports category and publish year 2015, Safe Search ON, order by viewCount. Then the video that comes out is a video that categorized the sports, and video publish year 2015 and at sort of the topmost video with viewers at most and videos with the 18+ category are not displayed.

In this application, user can watching the video. For example, in the picture below with a video “Ost Legenda Ular Put..” the user simply klik the video and going into the page next to watch the video on the select.

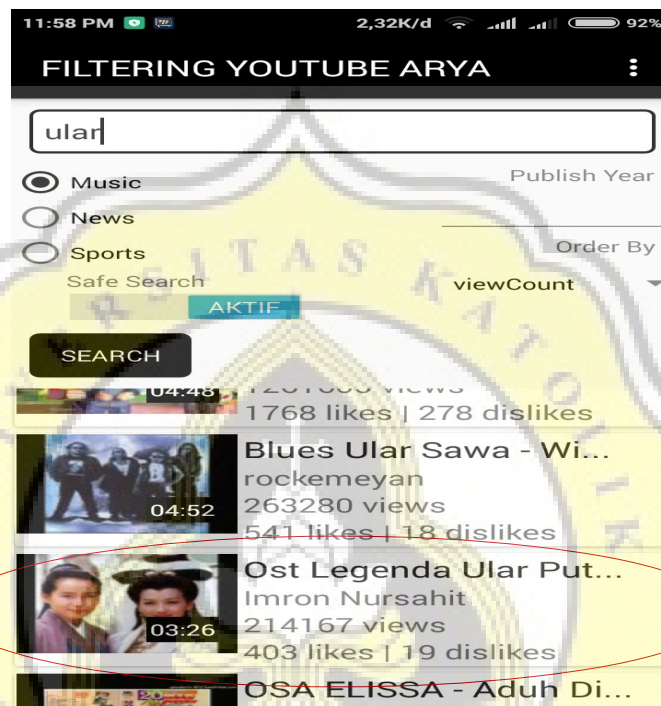


Illustration 5.9: Wacathing Video 1

Next will go to watch video, this project can playing video, paused the video, changed resolution of video, full screen video, etc.



Illustration 5.10: Page for Watching a Videos

After watching the video, in this application can also see the video that has already been watching earlier in the History and the video will be stored in history.

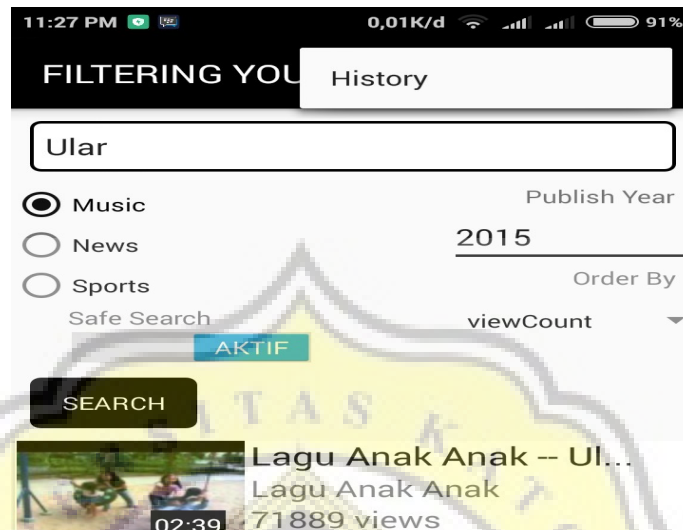


Illustration 5.11: Menu History

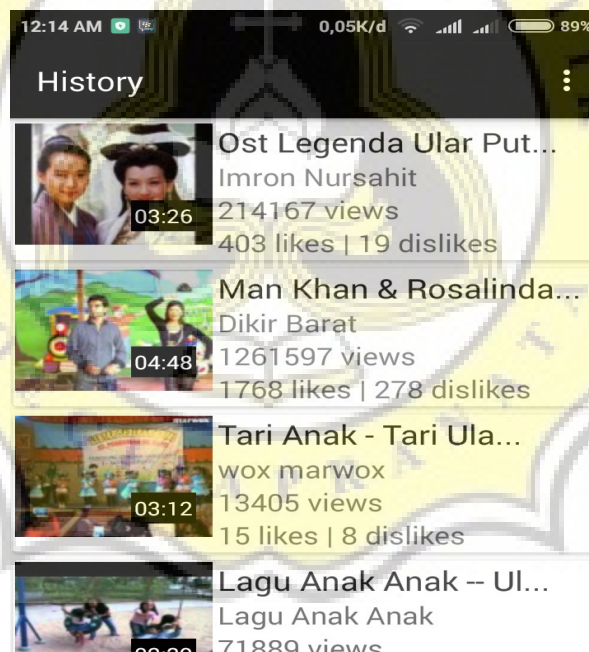


Illustration 5.12: Page of History

The picture above is the history to show that has been on the play by the user, and user can also remove all videos in history by clicking the menu “Delete History”

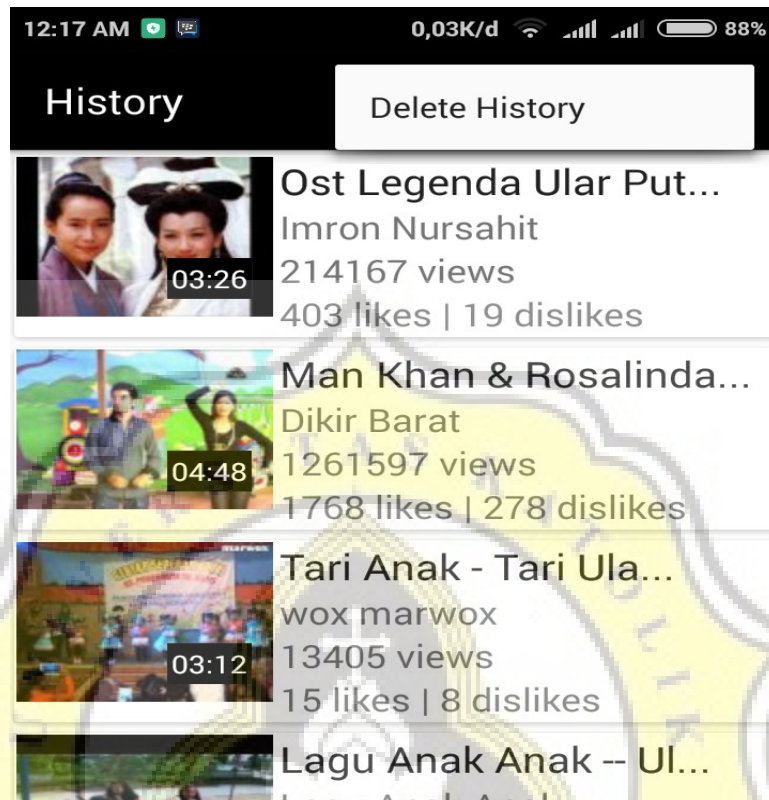


Illustration 5.13: Delete History



Here an the results of testing will be served in the form of table testings.

Table 5.1: Testing

ACTIVITY	FUNGCTION	TESTING
Box Searching	To find the keyword of the video	The title of video can be searched in the application
Publish Year	To manage video based on publish year	The video shown on the basis of publish year
Button category MUSIC	To manage video based on category of MUSIC	The video shown on the basis of category of music
Button category SPORT	To manage video based on category of SPORT	The video shown on the basis of category of sport
Button category NEWS	To manage video based on category of NEWS	The video shown on the basis of category of news
Button Order by ViewCount	To order video based on viewCount	The video shown on the basis of viewCount
Button Order by DATE	To order video based on Date	The video shown on the basis of date
Switch Safe Search	To enable Safe Search	Video category 18+ by not in the show
Menu History	To save in the History of video that has been in play	Video saved in the history
Delete all history	To delete all video in history	Video deleted