

CHAPTER 4

ANALYSIS AND DESIGN

4.1 Analysis

In general, youtube is the place for users search for the videos desired by the user. However, youtube still have many lack. Youtube will show all the video based on what user type in the searching box. And youtube will provide all the video in all categories. It cannot shows specific video that user looking for. Based on a lack of youtube above, an android application which developed using Youtube data API. The Youtube Data API is one of the service for developers to improve youtube features. This project using Youtube Data API which has function for the application is made. This project use Youtube data API is to take data from Youtube, from searching, see category, manage the category, playing video, to be like and unlike video.

This project made using the android studio version 2.3. Android studio is a editor code as a means of the development of which useful for making an application based android .

Besides need the android studio this project also use a KEY from Youtube Data API, Key would serve as a link between youtube this project to calling and receiving data from Youtube Data API. To have a key from Youtube Data API need registration first in address <https://console.developers.google.com/> and select library Youtube Data API, next create project, after that submit API KEY. KEY Youtube Data API in projects can be used to take data from Youtube starting from taking videos, see the video, see viewer, likers, and unlike, etc.

The first step of this project is using a splash screen. Splash screen is the first page to an application. To use Youtube Data API, this project using parts that have been Youtube Data API, there are three parts used in this project, which are parts snippet, part contentDetails, and part statistic. The part snippet is part of

channelId, channelTitle, title, and description. channelId is the id of a video taken. channelTitle is channel of title a video taken. Title is a title from video taken. Description is description of a video taken. This project also summons part contentDetails that serves that could display view count, like count also dislike count in this project. This project last use part statistic to can take data to display duration of Youtube videos.

After parts is in want have been over call, the next step this project need contents to could display video and playing video in application. This project need Youtube player that fire has provided by Youtube Data API, Youtube player is library from Youtube Data API function to display videos and play Youtube videos that has already been selected by the user. Youtube player can download in <https://developers.google.com/youtube/android/player/> and install in library of Android Studio. After the feature of parts that have been provided from Youtube Data API connected , the next step this project make category. This project will use some categories. These categories are functions to the user can be manage the video by the user. This project using the category of music, category of sports and category of news. Categories of music is a category that is associated with the video music. In Youtube Data API, every category have an ID, to call the ID of a category, should take a look at <https://developers.google.com/youtube/v3/docs/videoCategories> to the information category of ID. In the category of music, the category of music has been ID 10, category of news is been ID 25, and category of sport is been ID 17.

4.2 Desain

Design is the solution of the problem in the manufacture of project. Here design that will be made :

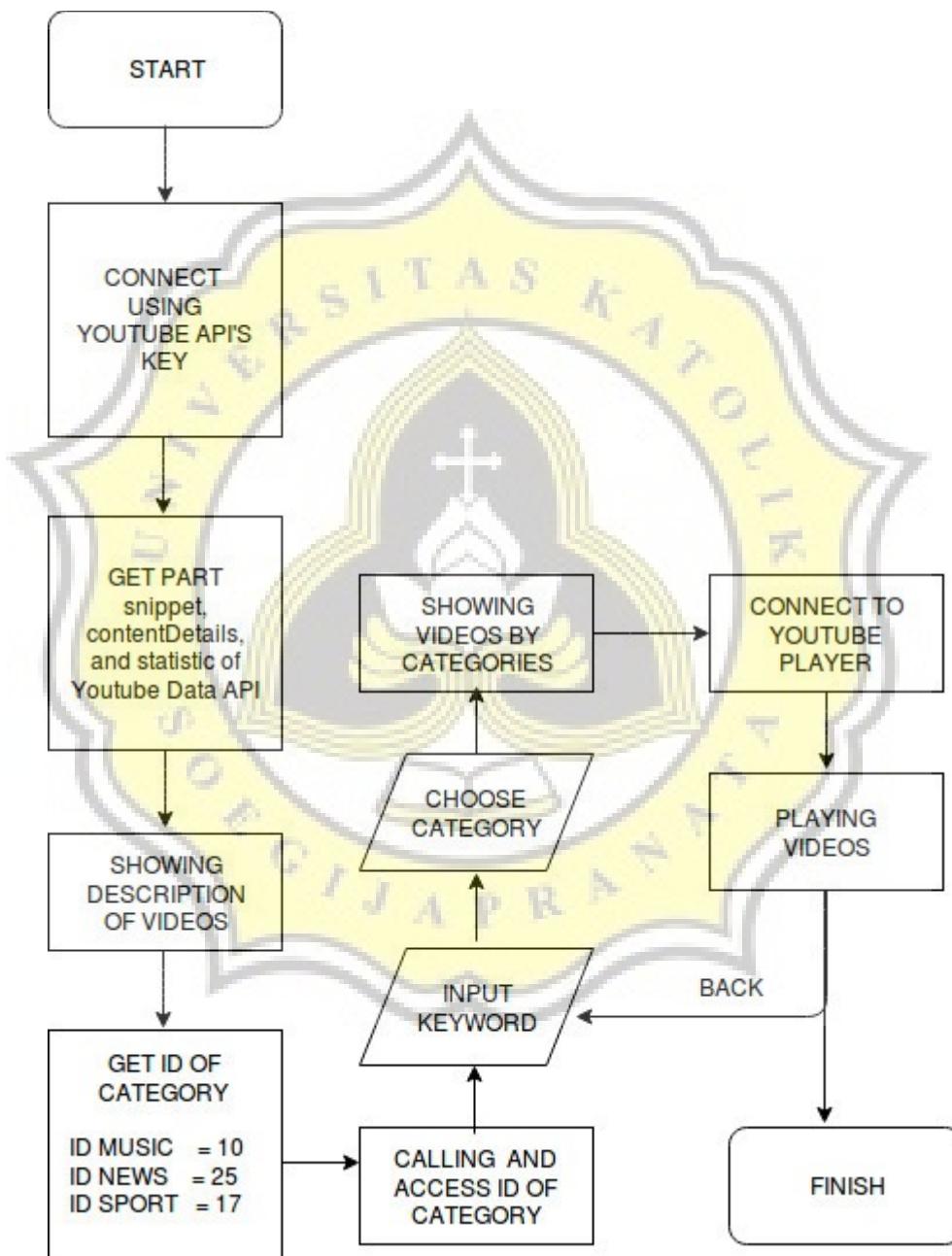


Illustration 4.1: Flow chart

From the flowchart above, first step in this project is connecting data using Youtube Data API's KEY, to get the KEY, need registration at the address <https://console.developers.google.com/>. After getting the Key, next step this project get parts of Youtube Data API, the parts are snippet, contentDetails, and statistic, the result of taking parts are featuring a description of a Youtube videos, for example the title of video, showing like and unlike, etc. After get parts of Youtube Data API, the next step this project need ID of Category.

This project get ID of Category in the <https://developers.google.com/youtube/v3/docs/videoCategories> to 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. After parts of Youtube Data API and ID Categories are connected, user can input keyword of the video, and can manage the video based on category by user. After all in the input, this project showing videos based on categories by user and then to play the videos, this project connecting videos use Youtube Player, after connected this project can playing videos.