INTRODUCTION

YouTube is very popular video sharing website. Downloading a video from YouTube is a tough job. Downloading the Downloader and get the video using that or go to any other website which fetches the video and saves on your computer. Using Python, this task is very easy. Few lines of code will download the video from YouTube for you. For this, there a python library named as 'pytube'. pytube is a lightweight, dependency-free Python library which is used for downloading videos from the web.

pytube is not the native library. You need to install it before using it. Installation is easy when you have pip. In the Terminal or Command Prompt, type the following command to install pytube.

IMPLEMENTATION

YouTube Video Downloader Python Project

The Youtube downloader project is a python project. The object of this project is to download any type of video in a fast and easy way from youtube in your device.

In this python project, user has to copy the youtube video URL that they want to download and simply paste that URL in the 'paste link here' section and click on the download button, it will start downloading the video. When video downloading finishes, it shows a message 'downloaded' popup on the window below the download button.

Steps to Develop Python YouTube Downloader

Project Prerequisites

To implement this project we use basic concept of python, tkinter, pytube library.

- ❖ **Tkinter** is a standard GUI library and it is one of the easiest ways to build a GUI application.
- ❖ **pytube** used for downloading videos from youtube

Download Youtube Downloader Python Code

Please download the source code of YouTube video downloader: **Python YouTube Downloader**

These are the following steps to build youtube video downloader project in python :

- ❖ Import libraries
- ❖ Create display window
- ❖ Create field to enter link
- ❖ Create function to start downloading

1. Import Libraries

Start the project by importing the required modules. In this python project, we import Tkinter and pytube modules.

2. Create Display Window

Tk() used to initialize tkinter to create display window
- ❖**geometry**() used to set the window's width and height
- ❖**resizable(0,0)** set the fix size of window
- ❖**title**() used to give the title of window
- ❖**Label**() widget use to display text that users can't able to modify.
- ❖**root** is the name of the window
- ❖**text** which we display the title of the label
- ❖**font** in which our text is written
- ❖**pack** organized widget in block

3. Create Field to Enter Link
- ❖**link** is a string type variable that stores the youtube video link that the user enters
- ❖**Entry**() widget is used when we want to create an input text field.

❖ **width** sets the width of entry widget
❖ **textvariable** used to retrieve the value of current text variable to the entry widget
- **place**() use to place the widget at a specific position

4. Create Function to Start Downloading

Url variable gets the youtube link from the link variable by **get**() function and then **str**() will convert the link in string datatype.

The video is download in the first present stream of that video by **stream.first**() method.

Button() widget used to display button on the window.

❖ **text** which we display on the label
❖ **font** in which the text is written
❖ **bg** sets the background color
❖ **command** is used to call the function

root.mainloop() is a method that executes when we want to run the program.

5. Python YouTube Downloader Output

THE PYTHON YOUTUBE DOWNLOADER OUTPUT
IS SHOWN IN THE FIGURE.

CONCLUSION

With this project in python, we have successfully
developed the youtube video downloader project using
python. We used the popular Tkinter library that used for
rendering graphics. We use the pytube library to
download videos from youtube.

REFRENCES

https://data-flair.training/blogs/python-youtube-downloader-with-pytube/

https://www.geeksforgeeks.org/pytube-python-library-download-youtube-videos/