

## Python Project to convert Video to Gif Format.

This video is all about creating a python program that converts any video to gif format.

You can change any **video to a Gif** by using this python program.

This is a very simple python project like other python projects we have done in the previous time.

So, the main task for this video is, to create or write a python code that helps you to convert the video to GIF.

Or, first I want to clearly describe this python coding project.

first, you need to understand what is gif formats means.

Because in this video we need to write a program to change the video to a Gif.

Ok when we see a video

Video files have different formats, like

.MP4

.MOV

.WMV

These are some common video formats.

For this project I use

.MP4 video file format.

And change this video file format to GIF file format.

Ok, now we will see what are GIF File Formats.

GIF stands for Graphics Interchange Format. GIF is a raster file format designed for relatively basic images that appear mainly on the internet.

GIF files also allow images or frames to be combined, creating basic animations.

So this python project is all about writing a python code that converts video file format which is, . MP4 to .GIF or Graphical interchange format.

These GIF image files are commonly used on the web **to display graphics and logos**.

They also support basic animation, which means they're a popular file format for memes on social media sites.

Ok, if you understand this

The next point is start coding this python project by opening any python IDE.

For this project, **I use PyCharm python IDE**. You can also use your own favorite python IDE.

Ok, now I open PyCharm

As you see I am on the PyCharm home page and I create a new python file to start coding.

Ok, now before we start coding we need a video file to convert to a gif file format.

If you don't have a short video you can search for any video on the internet and download it.

And put it in the same folder to this PyCharm python file to execute without the error.

So, I already have a video so I will put this video and my PyCharm python file by opening the new folder.

So now I will create a new folder and I give the folder name Video to gif like this and inside this folder, I put my video.

Ok, now we can start coding on PyCharm.

Firstly, I will import important python modules for converting video to gif.

So,

I write

```
From moviepy.editor Import *
```

Like this

This star is used to import everything from moviepy.editor class.

By the way, **MoviePy** is a **Python module for video editing**, which can be used for basic operations (like cuts, concatenations, title insertions), video compositing, video processing, or to create advanced effects. It can read and write the most common video formats, including GIF.

So, you need to import this python module.

However, if you are the first time when you use this python module you need to install it to your python project first before importing it.

To install

you can use PyCharm itself.

At the bottom of PyCharm, you can click terminal and it opens like this

After that

You can write

**Pip install moviepy**

Like this

Pip install moviepy

When you hit enter it starts to download and install it.

However

For me, I have already installed it and now the only thing is importing this python module and Use it.

For importing

You can write

**From moviepy.editor Import \***

So, this is the first step of this project.

```
from moviepy.editor import *
```

Ok, now we move to the next code which is creating a variable and storing a video file

For that, I write

```
Video = VideoFileClip()
```

Inside this parantesis

I will put my video file name

For you, you can write your video file name inside a single or double quote.

This single or double quote is used to pass the video file name as a string.

And when you write VideoFileClip()

V,F,and C are capital.

And this video file clip is one of a function in the moviepy python module.

So,

You can write

```
Video = VideoFileClip()
```

And for me, I write

My Video file name.

Which is My\_video.MP4, because my video file format is .mp4.

Inside a double quote

Like this.

```
video = VideoFileClip("My_Video.mp4")
```

Ok after that

I write

Video. write underscore GIF.

And inside this paracentesis

I give the file name to save the gif file

So, I write My\_Video.GIF

Inside the single or double quote.

Like this.

```
video.write_gif("My_Video.gif")
```

Ok now we finish this python project

So, we need to run this python code and see how it converts the video to gif file format.

Now I click and run it

And as you see it starts to convert it.



It shows the percent how much percent it is converted.

It may take some time depending on the video length and your computer processing speed

After it finishes the process

You can go to the folder you put your video file and you will get another additional file which is the gif file format.

For me, you can see this file

This file format is

as you see it is a GIF format.

Like this

So, in this python project, we write a program that converts video to GIF file format.

Ok, this is all about this video

Thanks for watching

I will see you in the next video

Thanks again.

!!! Full Code!!!

```
from moviepy.editor import *  
  
video = VideoFileClip("My_Video.mp4")  
video.write_gif("My_Video.gif")
```

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