Generating a Barcode python project.

In this video we will see how to Generate a Barcode.

By using python programing language.

In this python project you can generate so many barcodes by running only one python code.

As you know barcodes have so many uses in the modern world like identification cards for products or you can use barcodes for different stuff identifications.

So, in this python project we can generate different barcodes by using python.

This is a very simple python project like the others python projects we see in this YouTube channel.

So, let’s get started.

Ok, when we come to this python project,

I use PyCharm python ide.

For this python project I also recommend you to use PyCharm IDE.

However, if you want to use other python ides you can use your own favorite python ide.

Ok,

Now I am in the PyCharm ide and this is my working page.

I already create a new python file to start this project.

So, to start this python project

First, we need to import some important python modules.

Which helps us to generate a barcode.

Ok,

The first important python module we use to create a barcode for this python project is,

python barcode.

This python barcode is not built-in python module, like turtle, date time, tkinter, and many other python modules.

So, we need to install this python module to use for our project.

Ok,

now the first step from this python project is installing this important python module.

So,

As you see I use PyCharm python ide and I use this ide to install python barcode.

Ok, to install any python module from PyCharm you can use two ways.

The first one is using the terminal section at the bottom of pytcharm ide.

You can click this terminal and it opens your python file path to install python module.

As you see when I click this terminal section it opens like this and after that you can write

Pip install python-barcode like this

And you hit inter it starts installing to your python project.

I already install it before so, I don't install now

But if you don't install this python barcode before you can install it in this way.

Ok, after that

we need to import this python module to use for our project.

For that I write

From barcode import ENA 13

```
from barcode import EAN13
```

This ENA 13 mean European article number 13 and it is one of python barcode standard.

There are so many python barcode standards you can use for your projects.

However, for this python project I want to use this

ENA 13 python barcode standard.

If you want to use other python barcode standard you can see available barcode standards and use the one you want to use.

Ok, next

I also import

From barcode.writer import image writer.

Like this.

```
from barcode.writer import ImageWriter
```

This image writer is used to generate our barcode as .png format.

As we know barcode is an image.

So,

If you don’t import image writer from barcode the final barcode becomes as .svg format.

Image can be png or .svg or it may be jpg format.

But the default barcode image standard from this python project is .svg format.

For that to get the barcode in the png format we need this python module.

So, we need to import image writer to convert svg to png image formats.

Ok, after we import this python modules

The next point is

Write a program which asks the user how much barcodes they want to generate.

This python project is not only to generate one or two python barcodes. You can generate many python barcodes as you want.

If you need 1 barcode you can generate 1 barcode only. If you need 10 barcodes you can generate 10 barcodes, if you need to generate 100 or 1000 barcodes you can generate by using this python code by running only once.

So, we need a program to ask the user how many barcodes they need to generate.

So, I write

Num – of – barcodes = and I use input python function to ask prompt from users

And int function to convert string to integer what we can call it type casting in python.

So

Num – of- barcodes = input()

And inside this parenthesis

I write a question,

How many barcodes you need?

Like this and

I convert to integer for that

I put int function at the start of this code.

```
num_of_barcodes = int(input("How many Barcodes you Need? "))
```

Whenever you use input function to accept any prompt it saves in string format for that we need to change string to integer for that I put this int function at the beginning.

Ok, after that

I create a variable number

Number = range ()

And in this parenthesis, I pass the number of barcodes.

This number of barcodes are a variable we create at the above and it has a value of the number of barcodes the user wants to generate.

So, number = range(Num – of- barcodes)

```
numbers = range(num_of_barcodes)
```

this range function used to generate sequence of numbers for generating barcodes,

for example, if you want to generate 10 barcodes it generates

a sequence of numbers starting from 0 to 9 at the total of 10 sequences.

Ok, if you ask me why you need to generate a sequence of numbers from this program.

The answer is I want to use for loop to generate many barcodes in one program.

For these types of programs using for loop is the beast option.

for that I use for loop.

Ok,

For that I write a program

For I in range and I pass this numbers

So, for I in range in numbers

After that I put colon at the end.

This colon is used for indentation in python program.

Ok,

After that I create another variable inside this for loop.

And I call it Id,

This program is used to ask the id of a product or the unique identification of each barcodes. For example if you want to generate 10 different barcodes you need to inter 10 unique id for each barcodes.

For that I write a program

Id = input()

And inside this parenthesis I ask a user to input the ide of the barcode,

So,

Inside this parenthesis I write

Give 12-digit numbers to your barcode id.

Inside a double quote or you can use single quote because both single and double quote in python is used to write strings. So, you can use one of them.

```
for i in numbers:
    id = input(" Give 12-Digit numbers for your barcode id: ")
```

Ok now after we ask the user to inter id for each barcodes the next point is creating objects from ENA13 class. As we say before ENA 13 means European article number 13 and it is one of python barcode standard.

So, now we create an object from this class.

For that, I give the object name

My_code

And

My_code = ENA13()

And inside this object I pass

Id and

Writer = image writer

So, this code is

My _code = ENA13(ID, writer=Image writer)

Like this.

```
my_code = EAN13(id, writer=ImageWriter)
```

this code is used to generate a barcode,

so, the next is saving this barcode

to save all the barcodes we generate we need different file name. that means if you generate 10 barcodes you need 10 file names to save each barcode.

So, to save them we need to ask the user to inter file name for the barcode.

Ok, for that I write the code to ask the user

And save a variable name.

So, name = input()

And inside this parenthesis I write

Give the name to save barcode:

Inside the double or single quote.

And

After that

My _code. Save(name)

This code is used to save python barcode with the given name.

```
name = input(" Give the name to save barcodes: ")
my_code.save(name)
```

Ok now we already finish this python project so the next point is.

Run this code and see how this code looks like

Ok to run this python code

I will click and select run python barcode file

And

As you see this program asks me how many barcodes you want to generate.

So I write 4 because I want to generate 4 barcodes you can give any number you want to generate.

So I give 4

Ok after that

It asks another quotation which says

Give 12-digit numbers to your barcode id: you need to give 12 digit numbers for your barcode id

After that it asks me

give the name to save barcode:

and you need to give the name to save

so, I give the name barcode 1

ok after that.

It asks a gain

Give 12-digit numbers to your barcode id:

So, you need to give barcode id for the 2nd barcode

You need to give different id.

After that it asks a gain

give the name to save barcode:

and I give the name to save is, barcode 2

ok it also asks the barcode id for the 3rd barcode so you need to give different id for the 3rd barcode and

after that you need to give the name for saving the 3rd barcode. For that I give the name barcode 3

ok, now it asks me

Give 12-digit numbers to your barcode id:

This is for the 4th barcode.

So, you need to give barcode id, and after that it asks the name to save it.

So, I give the name barcode 4

Ok.

After that it says

Process finished with exit code 0

As you see this program ends and it doesn’t show any thing from this.

How ever if you see the python file from this section it generates all barcodes.

That means it generates a total of 4 barcodes with the name barcode 1, barcode 2, barcode 3, barcode 4. And you can see by clicking each of them.

This is all barcodes we generate from this program.

If you want to generate another barcode you can run and generate other barcodes.

Ok, this is all about how to generate a barcode by using python programing language.

ok, this is all about this video

thanks for watching!

I will see you in the next video

Thanks again.

!!! Full Code !!!

```
# First install python barcode Module
from barcode import EAN13
from barcode.writer import ImageWriter

num_of_barcodes = int(input("How many Barcodes you Need? "))
numbers = range(num_of_barcodes)

for i in numbers:
    id = input(" Give 12-Digit numbers for your barcode id: ")
    my_code = EAN13(id, writer=ImageWriter)
    name = input(" Give the name to save barcodes: ")
    my_code.save(name)
```

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