

## Battery Notifier python project for Laptop computer

Hello everybody welcome back to this real-world use case python project.

In this python project, we write a python program that helps us to notify the battery percentage of our computer or laptop.

This python project is one of the basic python projects you need to do as a beginner programmer.

Ok, now we can start this python project by selecting and opening python IDE.

For this project I use PyCharm python IDE.

If you want to use another python IDE, you can use them.

So, now I open PyCharm and I create a new python file to start it.

For that I open PyCharm

And to create a new python file

I click this file at the top and select new

After that I select python file and then you need to give the file name for this python project, I give the name

### Battery notification

And I hit enter it creates a new python file.

Ok, now we can start this python project by importing important python modules, which helps us to create this battery notification program for our computer.

Ok, for this project I use

Almost 3 python modules

The first one is

Time module

I need to use this python module to get a notification within a given interval of time

For example

If I want to get a battery notification every 1-hour interval, I use this time module.

Ok, the 2<sup>nd</sup> python module I use for this python project is psutil

That means, psutil

process and system utilities

this psutil, is a cross-platform library for retrieving information on running processes and system utilization

this is used to retrieve information's on (CPU, memory, disks, network, sensors) in Python.

So, for this python project I use [psutil python module](#) for retrieving our laptop battery percentage.

For that I use this python module.

Ok, another python module I use for this python project is [player python module](#).

This player python module is used to send notifications to our computer

so, to get a notification functionality I use player python module.

Ok, now to use those python modules you need to install first

Time python module is a built in python module so, you don't need to install it,

However to use the psutil and player python module You need to install it.

So, to install them you can use pycharm python IDE At the bottom of pycharm python IDE you will get a terminal tab as you see

There is a terminal tab and

When you click this terminal, it opens like this

After that to install psutil python module

You need to write

**Pip install psutil**

Like this

And you hit enter

It starts to download and install it automatically.

In this way you can install psutil python module.

And also, to install player

You need to write

`pip install player`

and hit enter is also install to your python project like the psutil python module.

For me

I already install both of them so, I don't install them again.

Ok, after you install them

The next point is importing them to our python project,

For that I write

For the time module

Import time

```
import time
```

Like this

The next is for psutil python module for that

Import psutil

```
import psutil
```

like this

and

for the player python module

from player import notification

I want to import the notification class from the player python module.

So,

```
from plyer import notification
```

ok, now I finish importing important python modules the next is creating an object called battery and get the laptop battery information by using psutil python module.

For that

```
Battery = psutil.sensors_battery()
```

I use this sensors\_battery() class to sense our laptop battery.

So,

```
battery = psutil.sensors_battery()
```

ok, after that I create another variable called percent to get the percentage of the computer battery.

For that

Percent = battery.percent()

Like this

```
percent = battery.percent
```

ok this two line of codes helps us to get the battery percentage,

and to get the notification I use

player python module

from the player python module I use the notification class.

So, to get the notification from the percentage of our laptop.

I write

Notification.notify() function

And inside this notification.notify()

Function I pass the parameters like

The title of the notification

The message of the notification and

The time out of the notification

That means how many times this notification is waiting after it notifies me.

So, for this python project

I give the title of the notification as

Title = "Battery Percentage" inside the double quote.

Like this

```
notification.notify(  
    title="Battery Percentage",
```

after that I will put coma to separate the parameters and next, I will give the message for this notification

so,

I write,

Message = str(percent) + "% battery Remaining"

I give this as a message

```
message=str(percent) + "% Battery  
remaining",
```

and the time to display this notification is

timeout=20

```
timeout=20
```



I give 20 seconds

Ok to generalize this notification code

```
notification.notify(  
    title="Battery Percentage",  
    message=str(percent) + "% Battery remaining",  
    timeout=20  
)
```

After that I finish this python project,

So, the next point is seeing how this program works by running it.

Now I will run this battery percentage notification python program and

As you see

It gives me the notification

It notifies

Python at the top and

It displays the title and the message to display the battery remaining percentage.

And it waits 20 seconds

Ok,

This is all about this python project

I think you get some concepts about this real use case python project.

Thanks for your time, I will see you in the next python project.

Thanks again!!

!!! The Full Code!!!

```
# Battery Notifier for Laptop Program
import time
import psutil
from plyer import notification

battery = psutil.sensors_battery()
percent = battery.percent

notification.notify(
    title="Battery Percentage",
    message=str(percent) + "% Battery remaining",
    timeout=20
)
```

