**Lab Exercise 5- Decorating Flows using Card**

**Decorating Flows**

Using Metaflow requires the use of decorators. In Python code, a decorator is a function that takes another function and extends its behavior without the need to modify it directly.

**Decorate Your Flow**[**​**](https://docs.outerbounds.com/intro-tutorial-S1E2/#decorate-your-flow)

In this flow, we have a step my\_decorated\_func to which the @card decorator is applied.

A diagram of a python decorator

Description automatically generated

Using @card creates a canvas where you can compose data visualizations using any data produced in that step or prior to it. After running the flow, you will see how to access the contents of the card from the command line.

**decorator\_flow.py**

from metaflow import FlowSpec, step, card  
class DecoratorFlow(FlowSpec):  
   
 @step  
 def start(self):  
 self.next(self.my\_decorated\_func)  
   
 @card  
 @step  
 def my\_decorated\_func(self):  
 self.data = [1, 2, 3]  
 self.next(self.end)  
   
 @step  
 def end(self):  
 print("Flow is done!")  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 DecoratorFlow()

**3Run the Flow**[**​**](https://docs.outerbounds.com/intro-tutorial-S1E2/#run-the-flow)

python decorator\_flow.py run

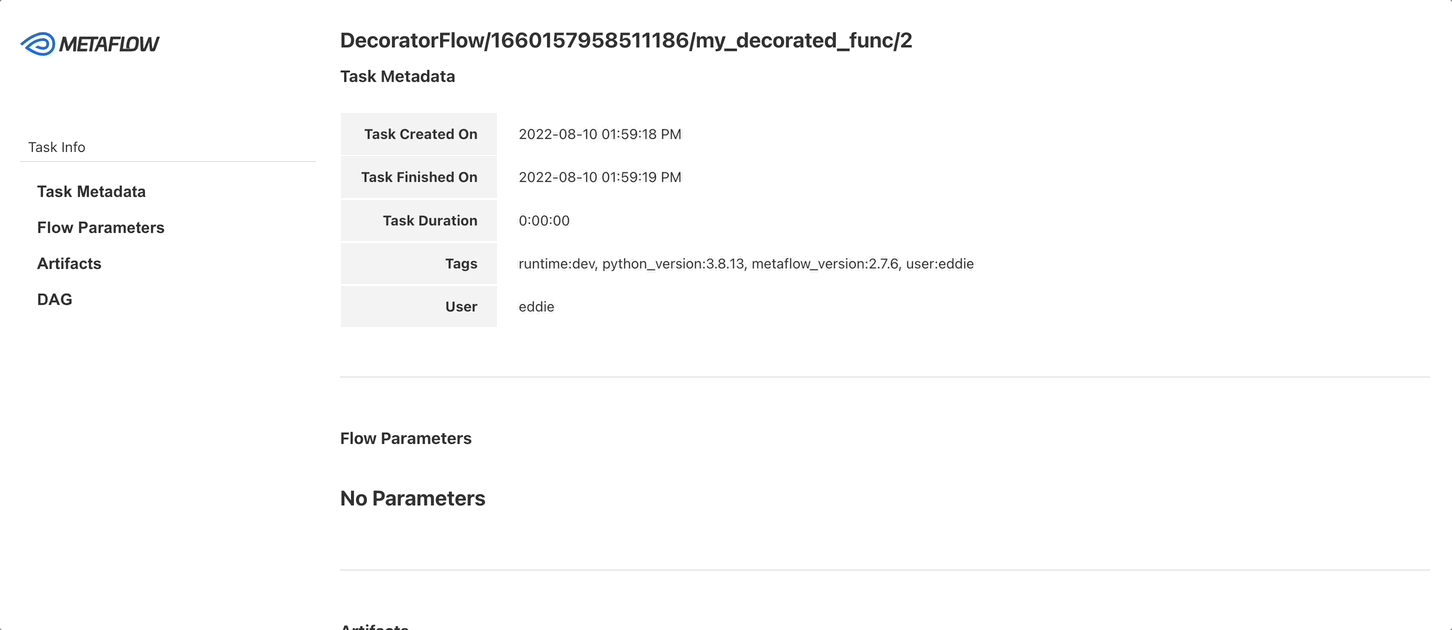
Workflow starting (run-id 1666720670441830):  
 [1666720670441830/start/1 (pid 52568)] Task is starting.  
 [1666720670441830/start/1 (pid 52568)] Task finished successfully.  
 [1666720670441830/my\_decorated\_func/2 (pid 52571)] Task is starting.  
 [1666720670441830/my\_decorated\_func/2 (pid 52571)] Task finished successfully.  
 [1666720670441830/end/3 (pid 52578)] Task is starting.  
 [1666720670441830/end/3 (pid 52578)] Flow is done!  
 [1666720670441830/end/3 (pid 52578)] Task finished successfully.  
 Done!

**View the Card**[**​**](https://docs.outerbounds.com/intro-tutorial-S1E2/#view-the-card)

Now that we have run @card for the my\_decorated\_func step, we can use the following command to visualize our flow:

python decorator\_flow.py card view my\_decorated\_func

You should now see a browser tab open where you can inspect flow results.



Using @card in this way is one example of a decorator extending the functionality of a step.