2ND ROUND ASSIGNMENT

**DOCUMENTATION**

Date: 28 Oct 2020

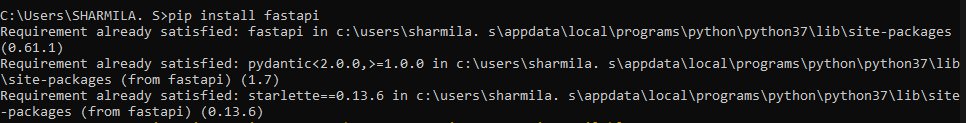
Source: <https://fastapi.tiangolo.com/>

Topic: FastAPI, Flask

Insights:

**FastAPI**

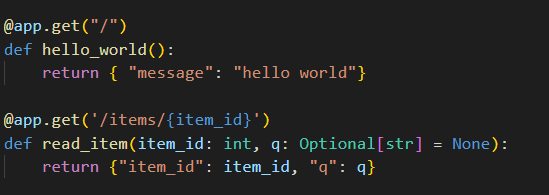
Installation (cmd line)



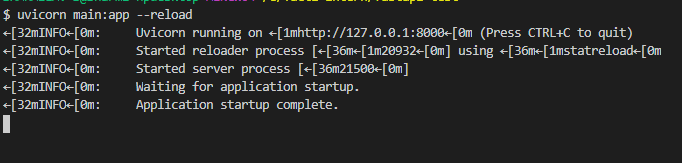
Importing FastAPI



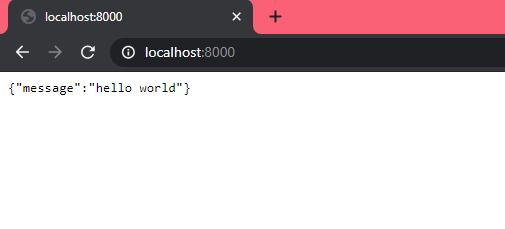
Using FastAPI to perform get request



**uvicorn** module is used to detect changes in the file and reloads whenever any change has been detected. It prevents us from running the file again and again while working.

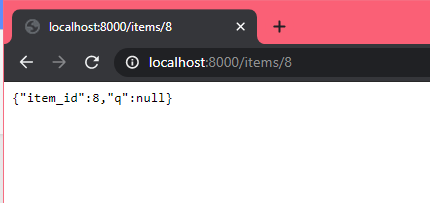


Get request to the root route ‘/’

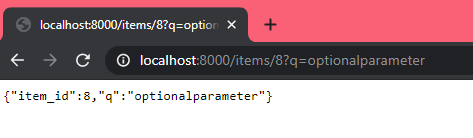


Get request to the custom route ‘/items/{item\_id}’

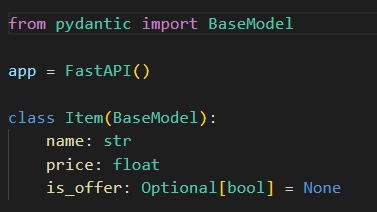
To access values from url parameters, parameter to be accessed is given a variable name which is enclosed within curly braces ( { } ). Values can be accessed within the function definition using the variable name.



Get request to the custom route ‘/items/{item\_id}’ providing optional parameter

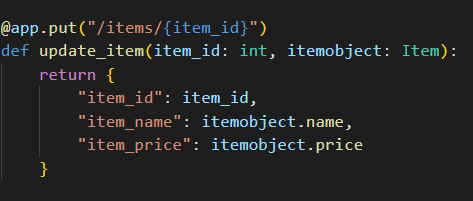


Defining a model for accepting values from body in PUT request

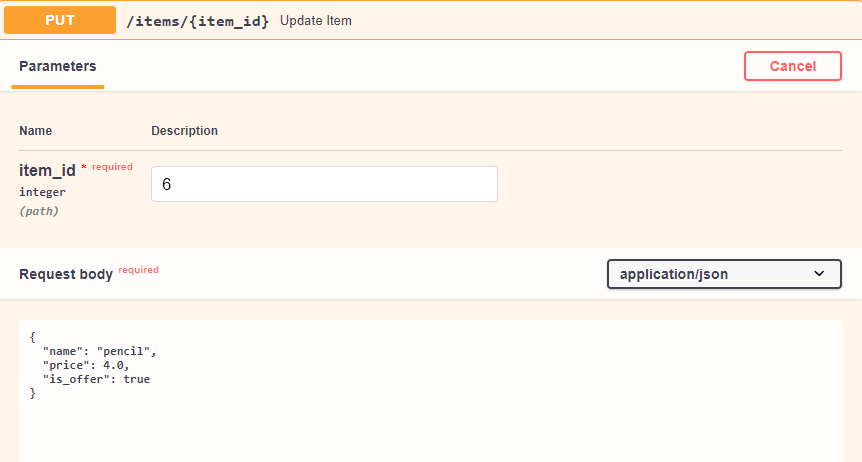


*BaseModel* from *pydantic* is used to define model for the data to be accepted.

For the PUT request, the data submitted from body(here, item{} ) could be received by *update\_item* function



Using Swagger UI ( localhost:8000/docs ) PUT request could be tested.



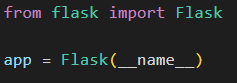
Response received:

{ "item\_id": 6, "item\_name": "pencil", "item\_price": 4 }

**Flask**

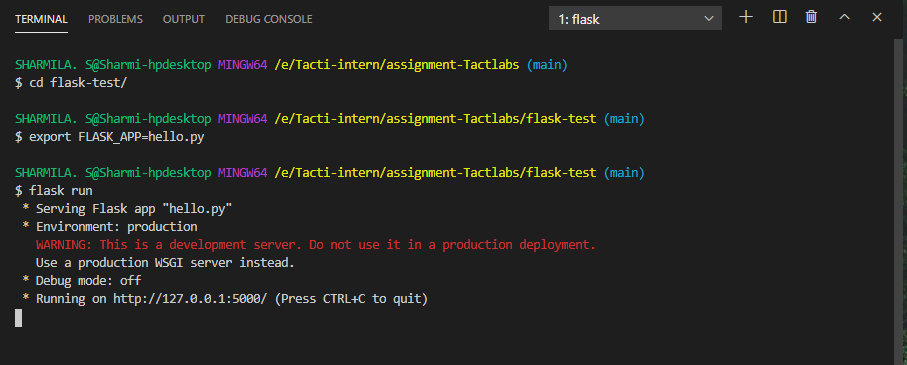
Importing flask

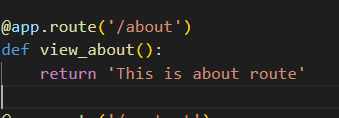
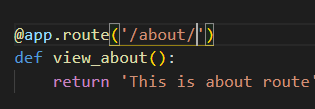
app variable is initialised to Flask



Run flask application

The environment variable ‘FLASK\_APP’ is updated to the name of the flask file. And using the command ‘flask run’, the server is started



For the image shown in the left, The url is unique **‘/about’** if it’s called along with a trailing slash, *Page Not Found* error occurs

For the image on the right, when accessed without the trailing slash, it redirects to the URL with trailing slash. Though it seems to work fine, the page could be accessed by two URL’s, one with trailing slash and one without which makes the search engine to index the particular web page twice.