

```
import os
```

```
from fastapi import FastAPI, Request
```

```
from fastapi.middleware.cors import CORSMiddleware
```

```
from swarms_cloud.schema.agent_api_schemas import (
```

```
    ParallelSwarmAPIInput,
```

```
    ParallelSwarmAPIOutput,
```

```
)
```

```
from swarms_cloud.schema.swarm_schema import SwarmAPISchema, AllSwarmsSchema
```

```
from swarms_cloud.utils.create_agent import create_agent_sync
```

```
# Create a FastAPI app
```

```
app = FastAPI(
```

```
    debug=True,
```

```
    title="Parallel Swarm API",
```

```
    version="0.1.0",
```

```
)
```

```
# Load the middleware to handle CORS
```

```
app.add_middleware(
```

```
    CORSMiddleware,
```

```
    allow_origins=["*"],
```

```
    allow_credentials=True,
```

```
    allow_methods=["*"],
```

```
    allow_headers=["*"],
```

```
)
```

```
@app.get("/")
```

```
def read_root():
```

```
    return {"Hello": "World"}
```

```
@app.get("/health")
```

```
def health():
```

```
    return {"status": "ok"}
```

```
@app.get("/version")
```

```
def version():
```

```
    return {"version": "0.1.0"}
```

```
@app.post("v1/swarms/parallel/create/{swarm_id}", response_model=SwarmAPISchema)
```

```
def create_parallel_swarm(request: Request, swarm_input: ParallelSwarmAPIInput):
```

```
    task = swarm_input.task
```

```
    created_agents = []
```

```
    # Parse the schema for all the agents
```

```
    for agent in swarm_input.agents:
```

```
        created_agents.append(create_agent_sync(agent))
```

```

# Now execute all the agents in parallel

import concurrent.futures

with concurrent.futures.ThreadPoolExecutor() as executor:

    futures = [executor.submit(agent.run, task) for agent in created_agents]

    # Wait for all the tasks to complete

    [future.result() for future in concurrent.futures.as_completed(futures)]

#

@app.post(
    "v1/swarms/parallel/{swarm_id}/completions", response_model=ParallelSwarmAPIOutput
)
def run_parallel_swarm_completions(
    request: Request, swarm_input: ParallelSwarmAPIInput
):
    task = swarm_input.task

    created_agents = []

    # Parse the schema for all the agents
    for agent in swarm_input.agents:
        created_agents.append(create_agent_sync(agent))

```

```
# Now execute all the agents in parallel
```

```
import concurrent.futures
```

```
with concurrent.futures.ThreadPoolExecutor() as executor:
```

```
    futures = [executor.submit(agent.run, task) for agent in created_agents]
```

```
# Wait for all the tasks to complete
```

```
[future.result() for future in concurrent.futures.as_completed(futures)]
```

```
# log_entry = ParallelSwarmAPIOutput(
```

```
#     completions=MultipleAgentOutputs(
```

```
#         agents =
```

```
#     )
```

```
# )
```

```
@app.post("v1/swarms", response_model=AllSwarmsSchema)
```

```
def get_all_swarms(
```

```
    request: Request,
```

```
    Swa,
```

```
):
```

```
    return AllSwarmsSchema(
```

```
        swarms=[
```

```
            SwarmAPISchema(
```

```
                id="1",
```

```
    swarm_name="Swarm API",  
    swarm_description="Swarm API description",  
    created_at=1628584185,  
    owned_by="TGSC",  
    tags=["tag_1", "agent"],  
    use_cases={  
        "use_case_1": "Use case 1 description",  
        "use_case_2": "Use case 2 description",  
    },  
)  
]  
)
```

```
if __name__ == "__main__":
```

```
    import uvicorn
```

```
    uvicorn.run(  
        app,
```

```
        host="0.0.0.0",
```

```
        port=os.getenv("AGENT_PORT"),
```

```
        use_colors=True,
```

```
        log_level="info",
```

```
    )
```