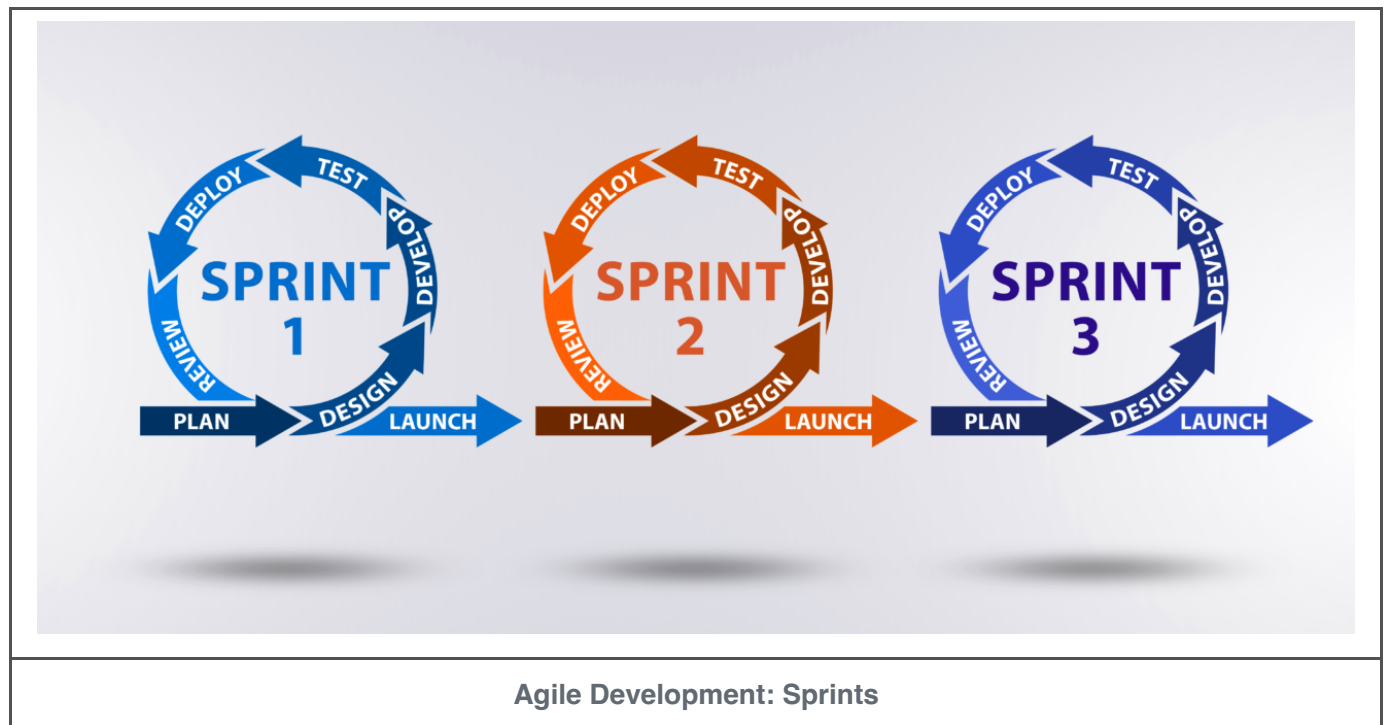


# COMSE6156 - Topics in SW Engineering: Cloud Computing

## Sprint 0 Status Report

### Overview

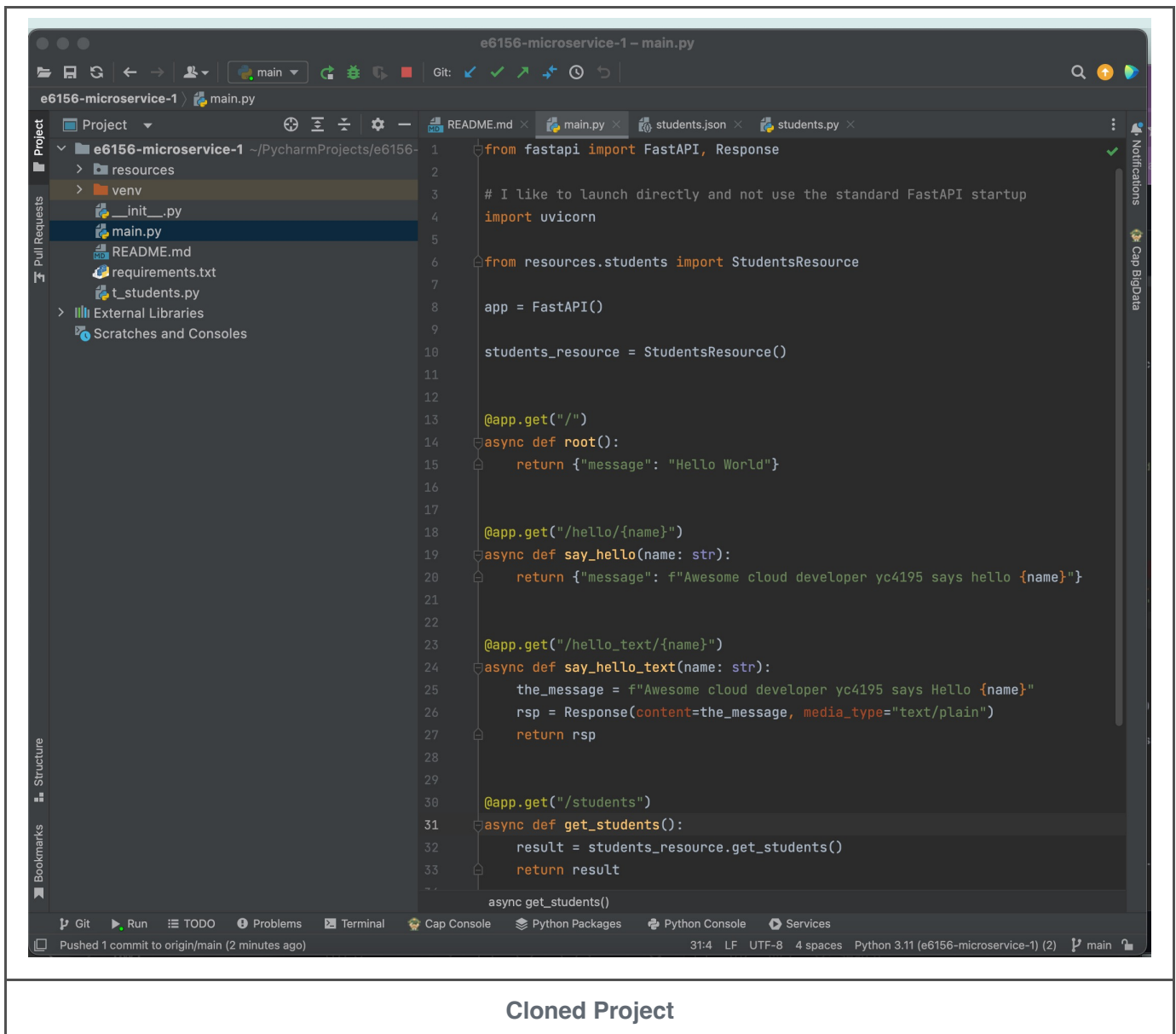
Sprint is a concept from [Agile SW development](#). Project teams will follow a simplified version of agile development to build their projects. A core concept in agile development is a *sprint*.



Sprint-0 is an individual sprint that focus on setting up their environments. All students must complete the sprint individually. This document is the template for submitting a status report on Sprint-0. Completing the report is simply taking screenshots and including them in the relevant sections of the Markdown document. You will submit a PDF version of the Markdown to GradeScope. We will post submission instructions on Ed for submitting the report.

### Clone and Modify the Starter Project

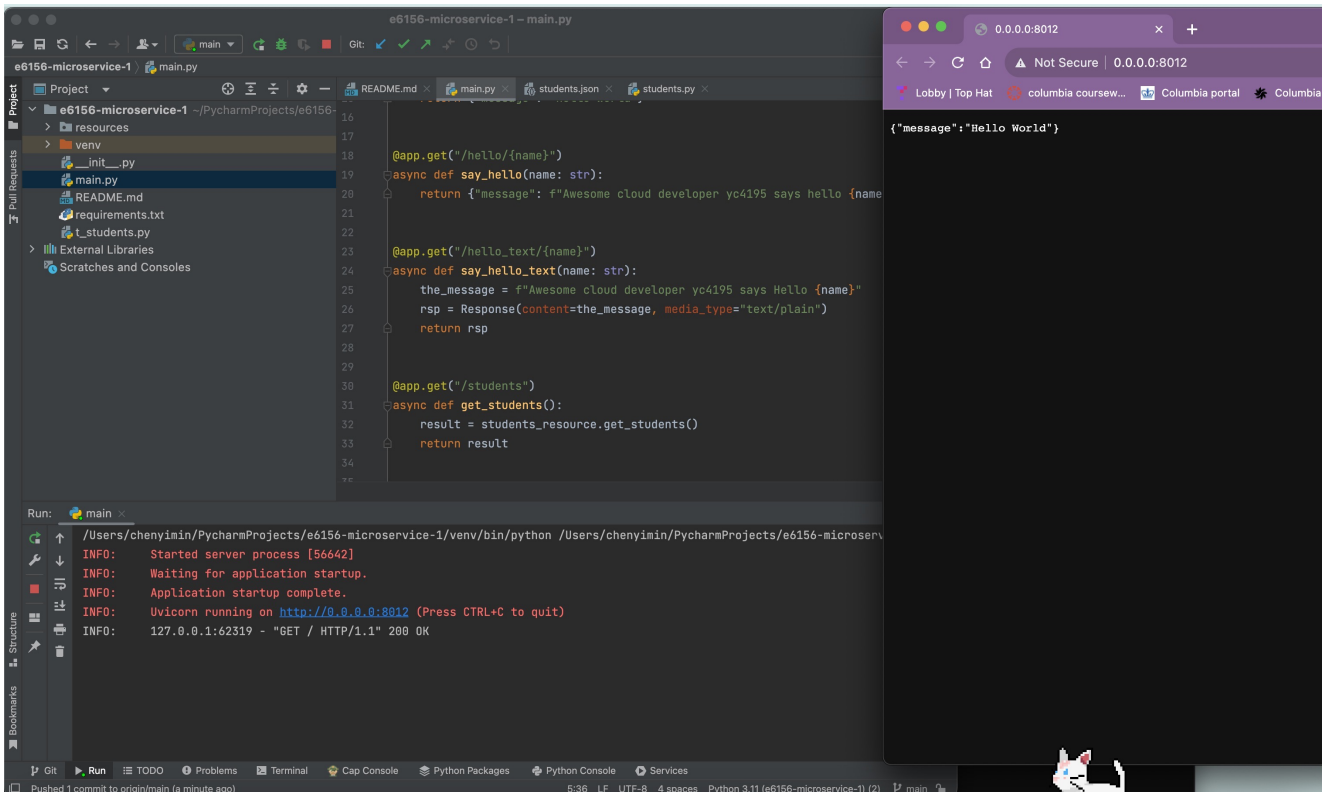
- Place a screen capture of your directory below. Display the structure in a terminal window, PyCharm, file explorer or any other mechanism.



Cloned Project

## Execute the Starter Project

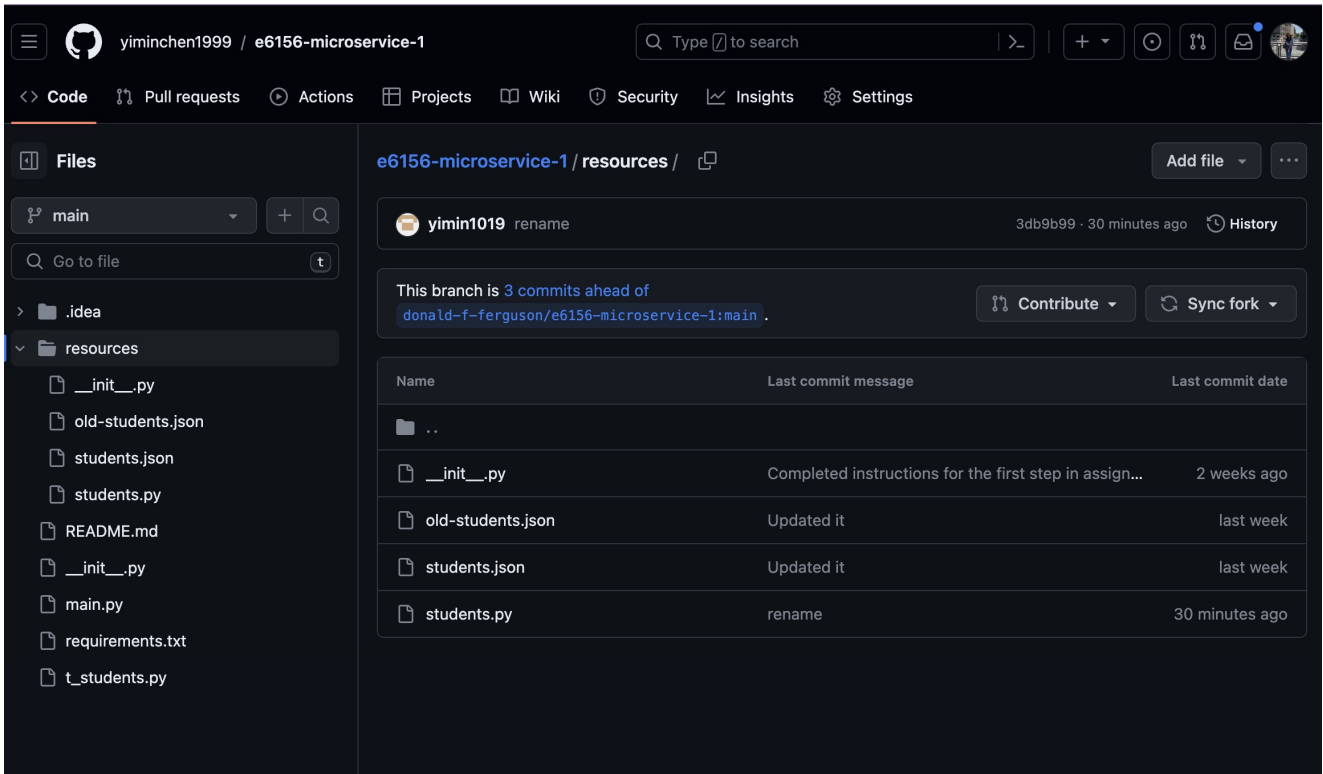
You can choose any formats for the screen capture as long as it shows your project executing. My simple example shows an execution window and browser side-by-side.



## Project Execution

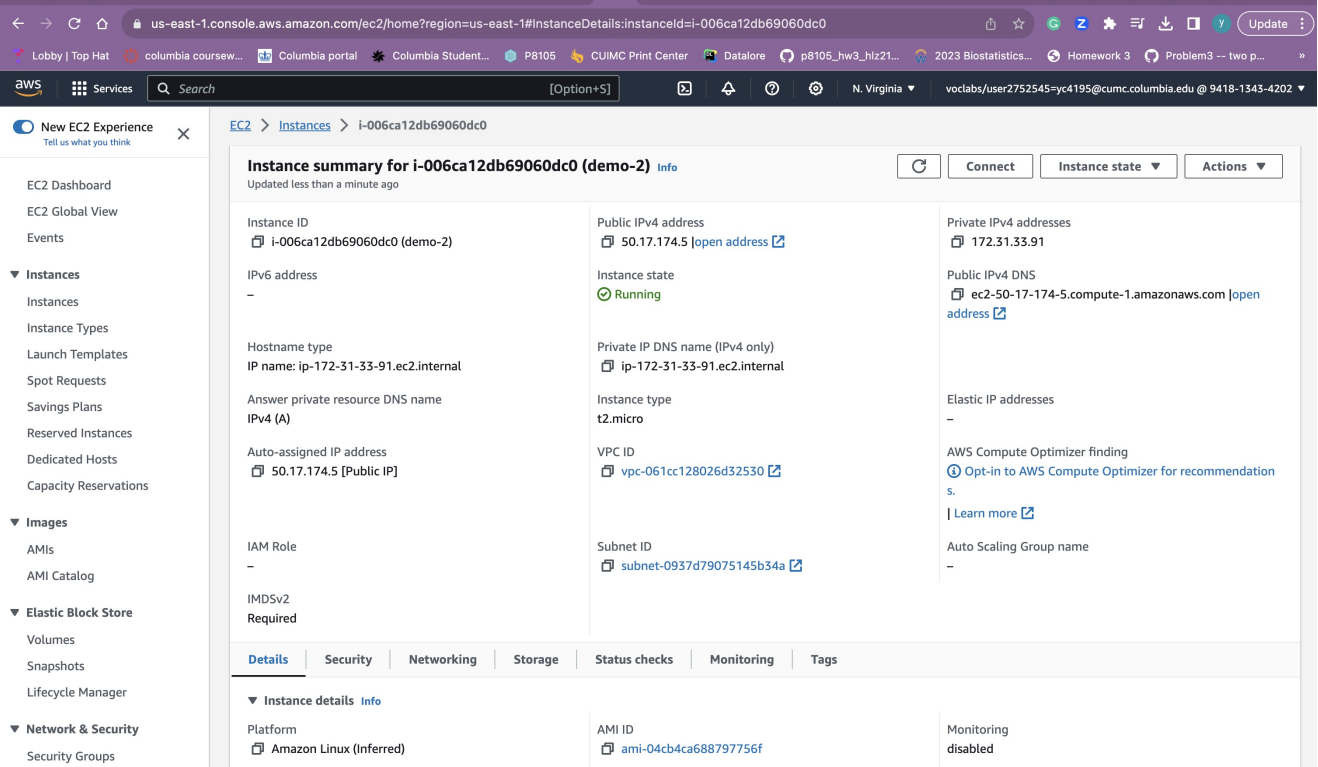
# Create Your Own GitHub Project

Make a copy of the project and create a project in GitHub. Show the project.



# Deploy and Test Project on AWS

Show the information about your VM through the console.



The screenshot shows the AWS Management Console interface. The browser address bar indicates the URL: `us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-006ca12db69060dc0`. The console displays the "Instance summary for i-006ca12db69060dc0 (demo-2)" page. The instance is in the "Running" state. The console shows various details including the Instance ID, Public IPv4 address (50.17.174.5), Private IPv4 addresses (172.31.33.91), Public IPv4 DNS (ec2-50-17-174-5.compute-1.amazonaws.com), Private IP DNS name (ip-172-31-33-91.ec2.internal), Instance type (t2.micro), VPC ID (vpc-061cc128026d32530), Subnet ID (subnet-0937d79075145b34a), IAM Role (None), and IMDSv2 (Required). The console also shows the "Instance details" section with the Platform (Amazon Linux (Inferred)) and AMI ID (ami-04cb4ca688797756f). The console is in the "N. Virginia" region and the user is logged in as "voclabs/user2752545-yc4195@cumc.columbia.edu @ 9418-1343-4202".

Instance summary for i-006ca12db69060dc0 (demo-2)		
Instance ID i-006ca12db69060dc0 (demo-2)	Public IPv4 address 50.17.174.5 <a href="#">open address</a>	Private IPv4 addresses 172.31.33.91
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-50-17-174-5.compute-1.amazonaws.com <a href="#">open address</a>
Hostname type IP name: ip-172-31-33-91.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-33-91.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding <a href="#">Opt-in to AWS Compute Optimizer for recommendation s.</a> <a href="#">Learn more</a>
Auto-assigned IP address 50.17.174.5 [Public IP]	VPC ID vpc-061cc128026d32530	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-0937d79075145b34a	
IMDSv2 Required		

▼ Instance details		
Platform Amazon Linux (Inferred)	AMI ID ami-04cb4ca688797756f	Monitoring disabled

Show the application running in the EC2 terminal and browser.

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connT...

Services

Search[Option+S]

N. Virginia

voclabs/user2752545

INFO: Started server process [26908]

INFO: Waiting for application startup.

INFO: Application startup complete.

INFO: Uvicorn running on http://0.0.0.0:8012 (Press CTRL+C to quit)

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ curl 0.0.0.0:8012

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ curl 0.0.0.0:8012

INFO: Shutting down

INFO: Waiting for application shutdown.

INFO: Application shutdown complete.

INFO: Finished server process [26908]

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ ls

README.md \_\_init\_\_.py main.py requirements.txt resources t students.py

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ python main.py &

[1] 27078

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ INFO: Started server process [27078]

INFO: Waiting for application startup.

INFO: Application startup complete.

INFO: Uvicorn running on http://0.0.0.0:8012 (Press CTRL+C to quit)

[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ curl 0.0.0.0:8012

INFO: 127.0.0.1:54796 - "GET / HTTP/1.1" 200 OK

{"message":"Hello World"}[ec2-user@ip-172-31-33-91 e6156-microservice-1]\$ curl 0.0.0.0:8012/docs

INFO: 127.0.0.1:49550 - "GET /docs HTTP/1.1" 200 OK

i-006ca12db69060dc0 (demo-2)

PublicIPs: 50.17.174.5 PrivateIPs: 172.31.33.91

0.0.0.0:8012

Not Secure | 0.0.0.0:8012

{"message":"Hello World"}

## Service Running