

# EPAM Interview

## Project Presentation

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Course: DevOps Online Kharkiv, 2021

February 2022

# Agenda

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## 1. Self-Presentation

## 2. Project Presentation

- Project Scheme
- The Launch and Configuration of AWS EC2 Instances
- EC2 Server Setup Using Ansible
- Webpage Deployment
- Project Results

# Self-Presentation

# Self-Presentation. ILLIA CHURKIN

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- Like spend time with my family, sport (bicycle), village, travelling, music, nature, etc.
- Communicative person, like to learn something new and move in a positive direction.
- English A2+/B1; Russian/Ukrainian – native.
- MS Office, Notepad++, Skype, Virtual Box, Atom, MobaXterm, MS Windows, Ubuntu Linux, etc. Basic knowledge: OOP, Bootstrap, PHP, Laravel, Net Beans, MySQL, Composer. Novice: HTML, CSS, Linux, GitHub, AWS, Bash, Docker, YAML, Docker, Jenkins, Python, Networking.
- Learning DevOps domain since September 2021.

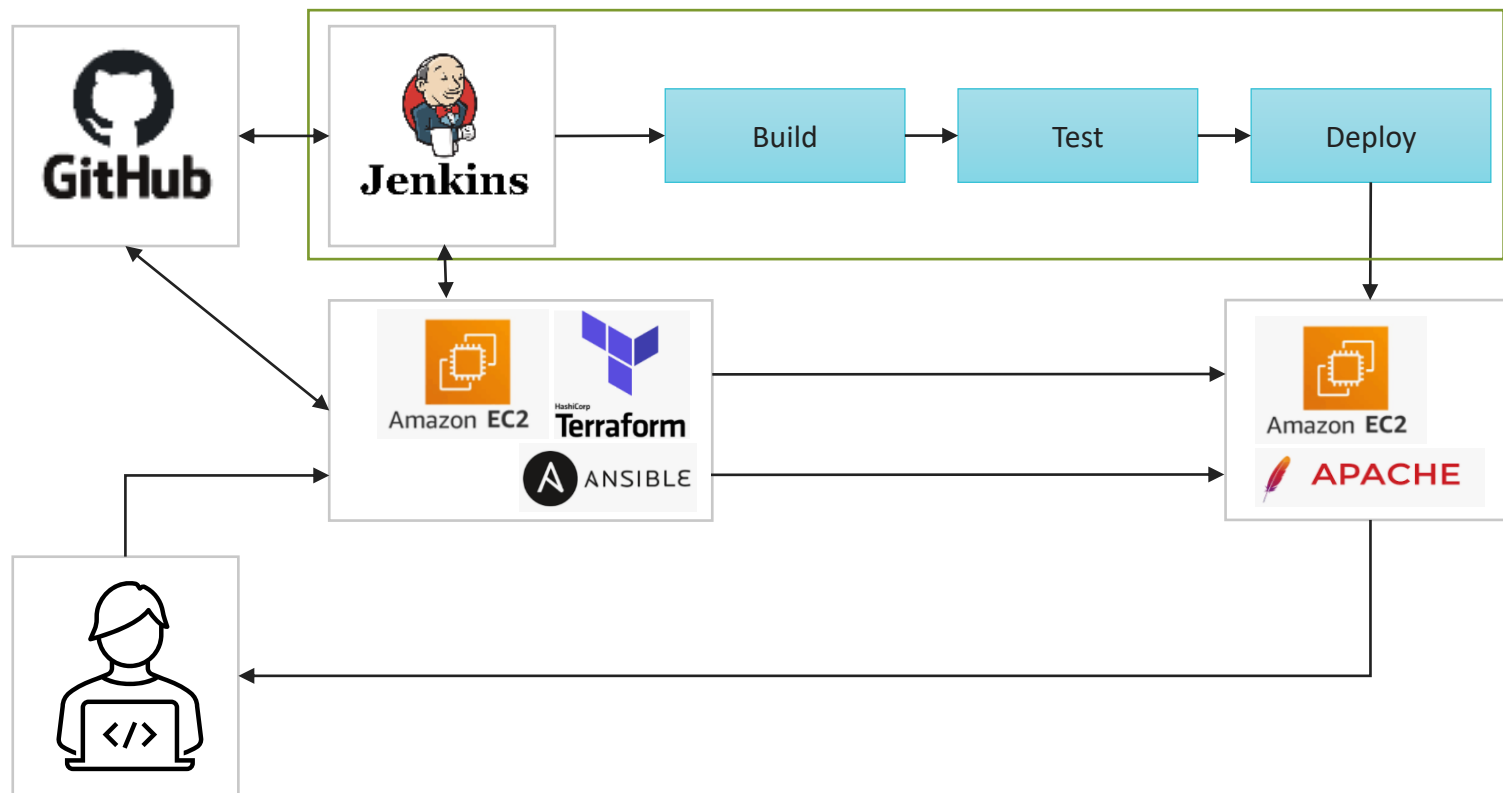
*E-mail: [ilia.churkin88@gmail.com](mailto:ilia.churkin88@gmail.com)*

*Phone: +38(093)-360-43-31*

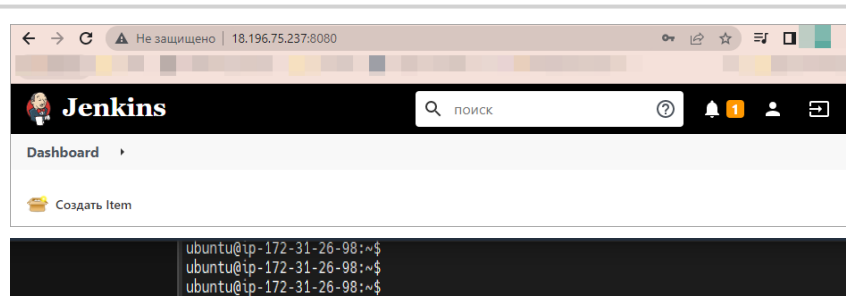
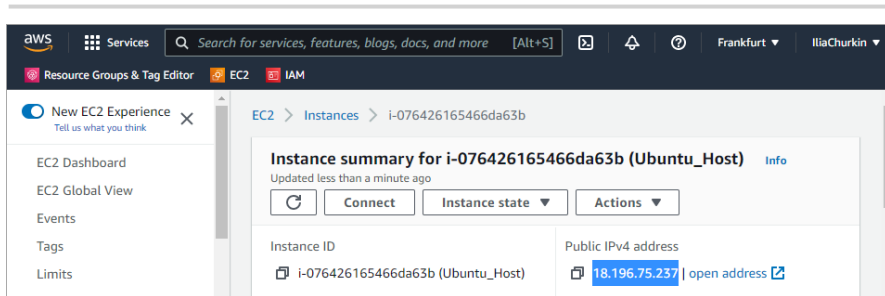
*Kharkov National University of Internal  
Affairs, 2010*

# Project Presentation

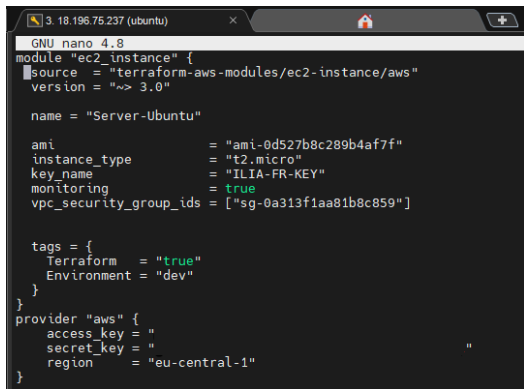
# Project Scheme



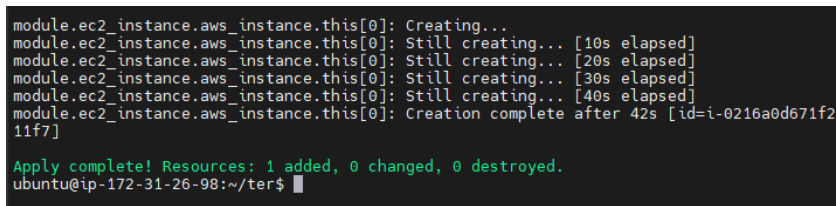
# The Launch and Configuration of AWS EC2 Instances



- Started manually the AWS EC2 instance, connected, updated and installed the following tools: Ansible, Terraform, Python, JDK, Java, Git.



<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type
<input type="checkbox"/>	Ubuntu_Host	i-076426165466da63b	Running	t2.micro
<input type="checkbox"/>	Ubuntu-Server	i-0216a0d671f2711f7	Running	t2.micro



- Created the Terraform file and started the AWS EC2 Ubuntu server with Terraform.

# EC2 Server Setup Using Ansible

```
3. 18.196.75.237 (ubuntu) x
GNU nano 4.8
[prod_servers]
server1 ansible_host=18.195.97.72 ansible_user=ubuntu ansible_ssh_private_key_file=/home/ubuntu/.ssh/ILIA-FR-KEY.pem
```

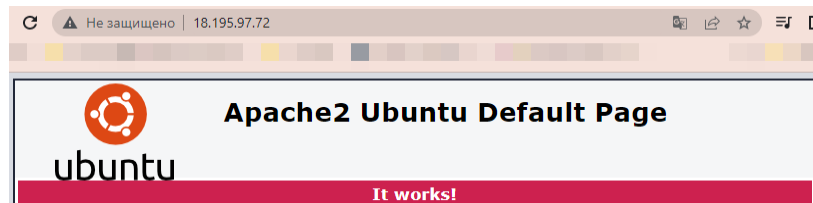
```
3. 18.196.75.237 (ubuntu) x
GNU nano 4.8
[defaults]
host_key_checking = false
inventory = ./hosts.txt
```

```
3. 18.196.75.237 (ubuntu) x
GNU nano 4.8
--
- name: Install Default Apache Web Server
  hosts: all
  become: yes

  tasks:
    - name: Install Apache
      apt: name=apache2 update_cache=yes state=latest

    - name: Start Apache2 and Enable it on Every Boot
      service: name=apache2 state=started enabled=yes
```

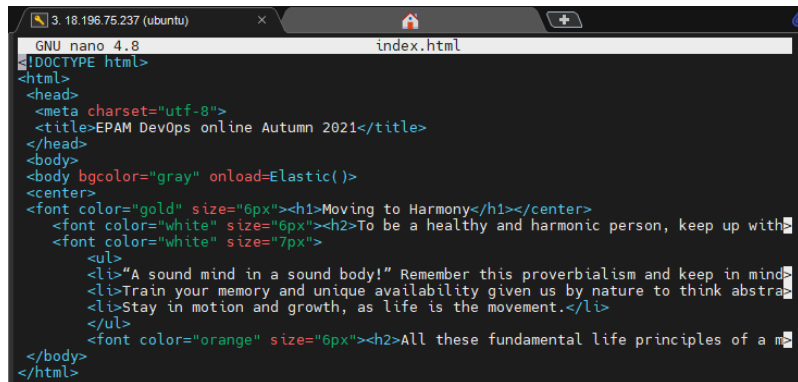
```
ubuntu@ip-172-31-26-98:~/ansible$ ansible-playbook playbook.yml
PLAY [Install Default Apache Web Server] *****
TASK [Gathering Facts] *****
ok: [server1]
TASK [Install Apache] *****
changed: [server1]
TASK [Start Apache2 and Enable it on Every Boot] *****
ok: [server1]
PLAY RECAP *****
server1 : ok=3 changed=1 unreachable=0 failed=0 skipped=0
```



- The AWS EC2 Ubuntu server is configured using Ansible, installed Apache Web Server.



# Webpage Deployment



```
GNU nano 4.8 index.html
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>EPAM DevOps online Autumn 2021</title>
</head>
<body>
<body bgcolor="gray" onload=Elastic()>
<center>
<font color="gold" size="6px"><h1>Moving to Harmony</h1></center>
<font color="white" size="6px"><h2>To be a healthy and harmonic person, keep up with</h2>
<font color="white" size="7px">
<ul>
<li>"A sound mind in a sound body!" Remember this proverbialism and keep in mind</li>
<li>Train your memory and unique availability given us by nature to think abstractly</li>
<li>Stay in motion and growth, as life is the movement.</li>
</ul>
<font color="orange" size="6px"><h2>All these fundamental life principles of a modern human will help you to result in a turbulent stream of today's world. </h2>
</body>
</html>
```

Repository URL

git@github.com:ilia88ilia/CICD\_project.git

Credentials

ilia88ilia (github-ssh-key)



Launch agents via SSH

Host

18.195.97.72

Credentials

jenkins (Jenkins)



master CICD\_project / index.html

Go to file



Ubuntu test3

Latest commit 679fe46 2 hours ago

History

1 contributor

20 lines (20 sloc) | 979 Bytes

Raw

Blame



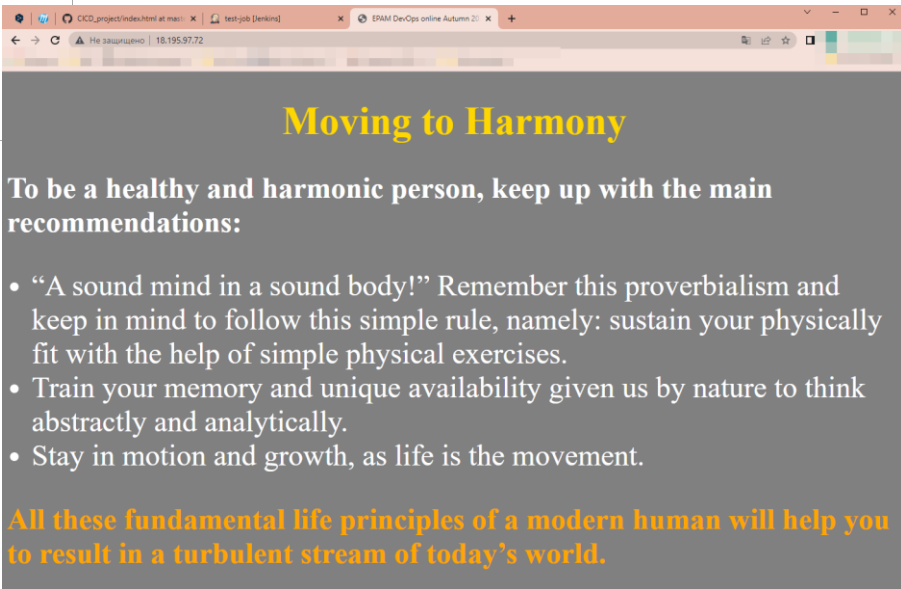
```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>EPAM DevOps online Autumn 2021</title>
6 </head>
7 <body>
8 <body bgcolor="gray" onload=Elastic()>
9 <center>
10 <font color="gold" size="6px"><h1>Moving to Harmony</h1></center>
11 <font color="white" size="6px"><h2>To be a healthy and harmonic person, keep up with the main recommendations:</h2>
12 <font color="white" size="7px">
13 <ul>
14 <li>"A sound mind in a sound body!" Remember this proverbialism and keep in mind to follow this simple rule, namely: sustain your physically fit with the help of simple
15 <li>Train your memory and unique availability given us by nature to think abstractly and analytically.</li>
16 <li>Stay in motion and growth, as life is the movement.</li>
17 </ul>
18 <font color="orange" size="6px"><h2>All these fundamental life principles of a modern human will help you to result in a turbulent stream of today's world. </h2>
19 </body>
20 </html>
```

- Deployed a webpage from GitHub to AWS EC2 Ubuntu server through Jenkins.

# Project Results

```
Started by user Ilia Churkin
Running as SYSTEM
Building remotely on Serever-Agent (Server-Agent) in workspace /home/jenkins/workspace/test-job
The recommended git tool is: NONE
using credential github-ssh-key
> git rev-parse --resolve-git-dir /home/jenkins/workspace/test-job/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url git@github.com:ilia88ilia/CICD_project.git # timeout=10
Fetching upstream changes from git@github.com:ilia88ilia/CICD_project.git
> git --version # timeout=10
> git --version # 'git version 2.25.1'
using GIT_SSH to set credentials github-ssh-key
> git fetch --tags --force --progress -- git@github.com:ilia88ilia/CICD_project.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision 679fa465ac2846d56a59601e7e05af0361240049 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 679fa465ac2846d56a59601e7e05af0361240049 # timeout=10
Commit message: "test3"
> git rev-list --no-walk 060ee4d85cfaa8b15f5ef93f9f1c942d285110bb # timeout=10
[test-job] $ /bin/sh -xe /tmp/jenkins7383741548329515463.sh
+ sudo cp /home/jenkins/workspace/test-job/index.html /var/www/html
Finished: SUCCESS
```

- Static webpage on the remote server

A screenshot of a web browser window. The address bar shows a URL starting with 'http://'. The page title is 'Moving to Harmony'. The main content area has a dark background with yellow text. The text reads: 'Moving to Harmony', 'To be a healthy and harmonic person, keep up with the main recommendations:', and a list of three bullet points. At the bottom, there is a yellow text block that says 'All these fundamental life principles of a modern human will help you to result in a turbulent stream of today's world.'

## Moving to Harmony

To be a healthy and harmonic person, keep up with the main recommendations:

- “A sound mind in a sound body!” Remember this proverbialism and keep in mind to follow this simple rule, namely: sustain your physically fit with the help of simple physical exercises.
- Train your memory and unique availability given us by nature to think abstractly and analytically.
- Stay in motion and growth, as life is the movement.

All these fundamental life principles of a modern human will help you to result in a turbulent stream of today's world.

**Thank you**