## **EPAM University Programs**

## DevOps education program

## Module 2 Virtualization and Cloud Basic

## **TASK 2.2**

- 1. Read the terms of Using the AWS Free Tier and the ability to control their own costs.
- 2. Register with AWS (first priority) or alternatively, you can request access to courses in AWS Academy if you are currently a student of certain University.
- 3. Find the <u>hands-on tutorials</u> and <u>AWS Well-Architected Labs</u> for your AWS needs. Explore list of step-by-step tutorials for deferent category. Use, repeat as many as you can and have fun))
- 4. Review <u>Getting Started with Amazon EC2</u>. Log Into Your AWS Account, Launch, Configure, Connect and Terminate Your Instance. Do not use Amazon Lightsail. It is recommended to use the t2 or t3.micro instance and the CentOS operating system.
- 5. Create a snapshot of your instance to keep as a backup.
- 6. Create and attach a Disk\_D (EBS) to your instance to add more storage space. Create and save some file on Disk\_D.
- 7. Launch the second instance from backup.
- 8. Detach Disk\_D from the 1st instance and attach disk\_D to the new instance.
- 9. Review the 10-minute <u>example</u>. Explore the possibilities of creating your own domain and domain name for your site. Note, that Route 53 not free service. Alternatively you can free register the domain name \*.PP.UA and use it.
- 10. Launch and configure a WordPress instance with Amazon Lightsail <u>link</u>
- 11. Review the 10-minute Store and Retrieve a File. Repeat, creating your own repository.
- 12. Review the 10-minute <u>example</u> Batch upload files to the cloud to Amazon S3 using the AWS CLI. Create a user AWS IAM, configure CLI AWS and upload any files to S3.
- 13. Review the 10-minute <u>example</u> Deploy Docker Containers on Amazon Elastic Container Service (Amazon ECS). Repeat, create a cluster, and run the online demo application or better other application with custom settings.
- 14. Run a Serverless "Hello, World!" with AWS Lambda.
- 15. Create a static website on Amazon S3, publicly available (<u>link1</u> or <u>link2</u> using a custom domain registered with Route 53). Post on the page your own photo, the name of the educational program (**EPAM DevOps online Winter 2022**), the list of AWS services with which the student worked within the educational program or earlier and the full list with links of completed labs (based on <u>tutorials</u> or <u>qwiklabs</u>). Provide the link to the website in your report and CV.