



DevOps Bootcamp**

PropPulse

Date of Submission: 16/02/2024

Reporting Period: 10/02/2024-16/02/2024

Group name: ParkPulse

Group members: Bahaa Abou Shakra, Rimah Housamedine, Aleen Zeidan, Jalal Sobh, Raafat

Al Halabi

Instructor: Elie Tahchi

Technical Advisor: Jana Kerbaj

Team Reprisentetive: Bahaa Abou Shakra

* DevOps Bootcamp

Section I: Overview of the Project

A webapp used to manage internal operations in hospitals, polyclinics and medical centers.

Concepts applied and functionalities for implementation: CI/CD, IaC configuration management, automated testing, monitoring and logging, containerization, orchestration, version control.

Section II: Summary of the Week's Overall Progress

• <u>CI/CD</u> After creating a GitHub repository, pushing the project files from the local server and adding the needed docker and yaml files, three docker images (database, frontend & backend) were created on DockerHub, using GitHub actions.

After that we started Jenkins pipeline in order to achieve a GitHub+Jenkins integration to pull the code from the repository to the Jenkins machine.

Then we will deploy a minikube cluster after installing the needed plugins, creating a kubernetes cloud on Jenkins and adding the needed minikube credentials.

Till now we're done with GitHub and DockerHub, Jenkins and minikube are in process; by 29th of February we must complete our final test of the automated deployment.

• **FSD** Some issues were recognized in the front end regarding the user experience, actually it's not a technical issue but it relates to the login page design, Aleen is working on t; by mid next week we must be done with the front end.

We noticed a bug in the MySql file, a conflict occurred in mode of authentication since we are using windows with linux VMs installed. After troubleshooting We decided to use a mixed mode of authentication that enables both windows and sql server authentication.

Section III: Distribution of Tasks per Team Member

- Aleen is responsible of the frontend development and the UX/UI design in addition to the app THREE TIER ARCHITECTURE;
- Rimah is responsible of the backend/database, working on the automated deployment and preparing a deployment documentation;

 Bahaa holds responsibility for CI/CD and preparing a admin/user documentation, besides reporting and guaranteeing that the project is on the right track and meeting deadlines

Section IV: Unfinished Business and Pending Activities

Pending activities:

Three tier architecture – assigned to Aleen; {deadline 29/02/2024} Deployment documentation – assigned to Rimah; {deadline 29/02/2024} Admin/user documentation – assigned to Bahaa; {deadline 29/02/2024}

Unfinished business:

Monitoring and logging – unassigned yet no deadline set, the task is under negotiation