DevOps Practical II

Dockerize https://github.com/swimlane/devops-practical and expose the site on a non-standard port (not 80/443). MongoDB should also be deployed as Docker containers.

Create a Helm chart for the application and use Helm (v3) to deploy it to a Kubernetes cluster. You can use a hosted service like EKS/GKE/AKS or create your own cluster using Kubespray (https://github.com/kubernetes-sigs/kubespray) or kURL (https://kurl.sh/). Use terraform to create as much of the kubernetes cluster and required infrastructure as possible.

Eliminate as many single points of failure for your Kubernetes cluster deployment as possible.

Bonus points for the following:

- Security
- Scalability
- Using Terraform to create the Kubernetes cluster and dependent infrastructure
- Using Packer to create the worker node images and applying the Ansible playbook
- Using Ansible to ensure NTP is installed and running on the worker nodes
    - As well Any dependencies needed for Kubernetes if not using EKS/GKE/AKS prebuilt images

Access the running app, register for an account, and add a record.

To deliver your work, create a public Github repository with the following (at a minimum):

- Readme with the commands used to deploy the Helm chart and Terraform
- Helm chart
- Terraform files
- Dockerfiles
- Screenshot of the running application with a new record added

If you don't make it through everything here we'd still like to see the progress you made and your thought process on the remaining work.