

DevOps Internship Assessment:

Part 1 (30 points):

- Clone this repo: <https://github.com/Ankit6098/ToDo-List-nodejs>
- Use your own mongodb database (check .env).
- Dockerize the application.
- Use GitHub Actions to create a CI pipeline that builds the image and pushes it to a private docker registry.

Part 2 (30 points):

- Create a Linux VM on your local machine or the Cloud.
- Use Ansible to configure the machine and install the needed packages such as Docker.
- Ansible has to run from your local machine against the VM.

Part 3 (40 points):

- On the VM, use docker compose to run the application. Make sure you configure the proper health checks.
- You need to continuously check for changes in the image on the docker registry repo. If a change is detected, the new image should be pulled.
- For the auto update part, you can use any tool of your choice. You would need to justify your choice.

Part 4 - Bonus (50 points):

- Instead of docker compose, use Kubernetes on the VM.
- For the CD part, use ArgoCD.

Due Date:

- Thursday, July 31st at 4:00 PM

Guidelines:

- You are allowed to make any assumption as long as you follow the best practices. If you have any, you need to document them.
- You are free to use any AI tool however you need to be able to justify your solution.
- You can use any virtualization software to execute the task (KVM - Oracle Virtualbox - VMware - others).
- You can execute the task on any cloud platform (AWS - GCP - Azure - others). Use the free tier.

Deliverables:

- Demo your work through a video (less than 3 minutes total in **English**)
- Document everything in the README file and push it to your repo. DON'T add any secrets.
- Submit your work at <https://forms.gle/GTjx5gkLXDufzsnQ7>