| **Track(s): DevOps** |
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| **Project ID:** |
| **Project Title: Automated DevOps Pipeline with Docker, Jenkins, and Ansible** |
| **Group ID: 5** |
| **Project Short Description:**  My project is a DevOps pipeline that automates the process of building, testing, and deploying a React.js application using Bun. It also builds a Docker image, pushes it to Docker Hub, and deploys it on a remote server using Ansible. The entire pipeline is managed by Jenkins and runs locally, except for the final deployment. Ansible connects to the remote server to configure it and run the Docker image, which is an Nginx container serving the React app. |
| **Project Context (third party interfaces, APIs, or other third party tools that will interact with your proposed design):**   * **Slack:** For notifications * **Bun:** Javascript/Typescript runtime * **Nginx:** For static hosting |
| **Example Application of the Proposed Project:**  A basic React app, statically hosted. The pipeline begins with code pushed to a local repository (GitLab) and ends with static hosting via Nginx on the deployment server. |
| **Tools (Hardware and Software needed for the project / needed to build a prototype):**   * **Jenkins** * **GitLab** |
| **Deliverables:**  [**https://github.com/Davenchy/DEPI-project.git**](https://github.com/Davenchy/DEPI-project.git) |
| **Project Notes (Background, Data, references…..etc):**  All project details are documented in the README file on GitHub. |