

# Lifecycle Management For Docker UI

PROPOSAL

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**Title:** Lifecycle Management For Docker UI

**Introduction:** Docker is a tool to build modern, lightweight containers. These containers can be used to house applications or services. The advantage of docker is that it makes application development easier for a number of reasons. These are mainly:

- Rapid development
- Easy deployment on most architectures
- Easy debugging and testing
- Piece of mind knowing that containers which run once will always run the same, as they are self-contained.
- Security - applications are isolated from one another.

**Description:** Presently, Docker is command line only, meaning the user must be comfortable with the terminal before they can use Docker. This is not ideal. The aim of this project would be to allow users to run the application and have a graphical access to the containers running on a selected server.

This application would give users access to the Docker API, which effectively allows them to perform any commands they can currently run but using a GUI.

The end goal of the project would also be to have the application itself run inside a Docker container, allowing for extreme portability and ease-of-use.

**Technologies and Frameworks:**

- Node.js server
- Possibly Angular front end
- Mocha testing framework
- Docker for containerisation
- Ansible for deployment and provisioning servers
- Possibly Jenkins for CI/CD

**Project Method:** Test Driven Development using Agile methodologies.

**Supervisor:** If possible, I would like to request Eamonn deLeaster be my supervisor. I think as Docker is such a new technology Eamonn's domain knowledge would be a great advantage to me.