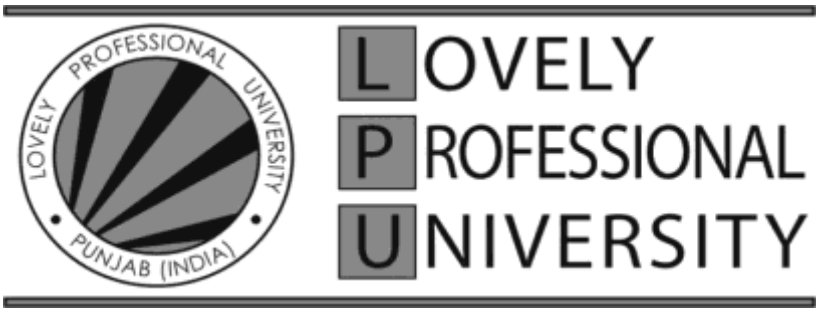


Project Report

on

Docker Complete Solutions

Submitted to

LOVELY PROFESSIONAL UNIVERSITY

for

Bachelor of Computer Science and Engineering

Submitted By

Shashwat Singh (Roll no – 67)

11912314

Submitted to

Navneet Kaur

Assistant-Professor

LOVELY FACULTY OF TECHNOLOGY & SCIENCES

LOVELY PROFESSIONAL UNIVERSITY

PUNJAB

CHAPTER 1

Introduction

Complete solution for Docker is my aim to provide a platform to the developer. If the developer converts their all the back-end work (API, Web-Apps) and front-end work into **Docker image**, then this platform helps to **configure the environment of Docker** on the server, able to **deploy your container**, **monitor your container**, **manage your networking parts, image creation** etc.

So, we are providing you a very user-friendly platform for all the above-mentioned works and you do not need to hire any DevOps engineer for managing the Docker tool neither you need to do any course.

You just come to this platform and make the account start using the service by give your server configuration details like (IP, authentication detail through which we are able handle your server).

CHAPTER 2

Technologies used

ExpressJS → It is an Node web framework which have library which makes our work easy to create api, through which we are able to handle the requests, where we also able to integrate with 'view' rendering engine through which we are able to render the page in easy way.

Ansible → It is an Configuration management tool through I am able to configure the client server or setup ther env by the help of the IP and authentication details.(It works with ssh protocol).

Docker → It is an type of Engine which provides you an flexibility to mange your containers and this tool is our main target to which we have tried to fully automate it.

MongoDB → It is a NoSQL database which stores data in form of key-value pairs.
By the help of this database I am able to manage the user with their authentication, and as well as their server data.

CHAPTER 3

Modules

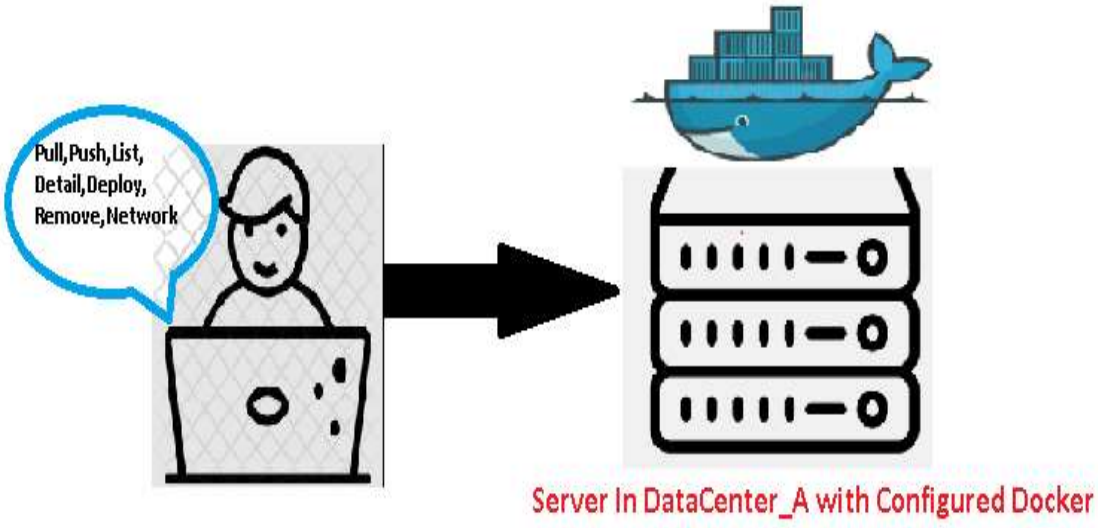
One who visits our tool/platform has to create his/her own account and after that he/she would be the admin of that account. Now let's see what all they can access with this account.

i) The user can configure docker on the server.

ii) They can control the docker which they have configured previously .

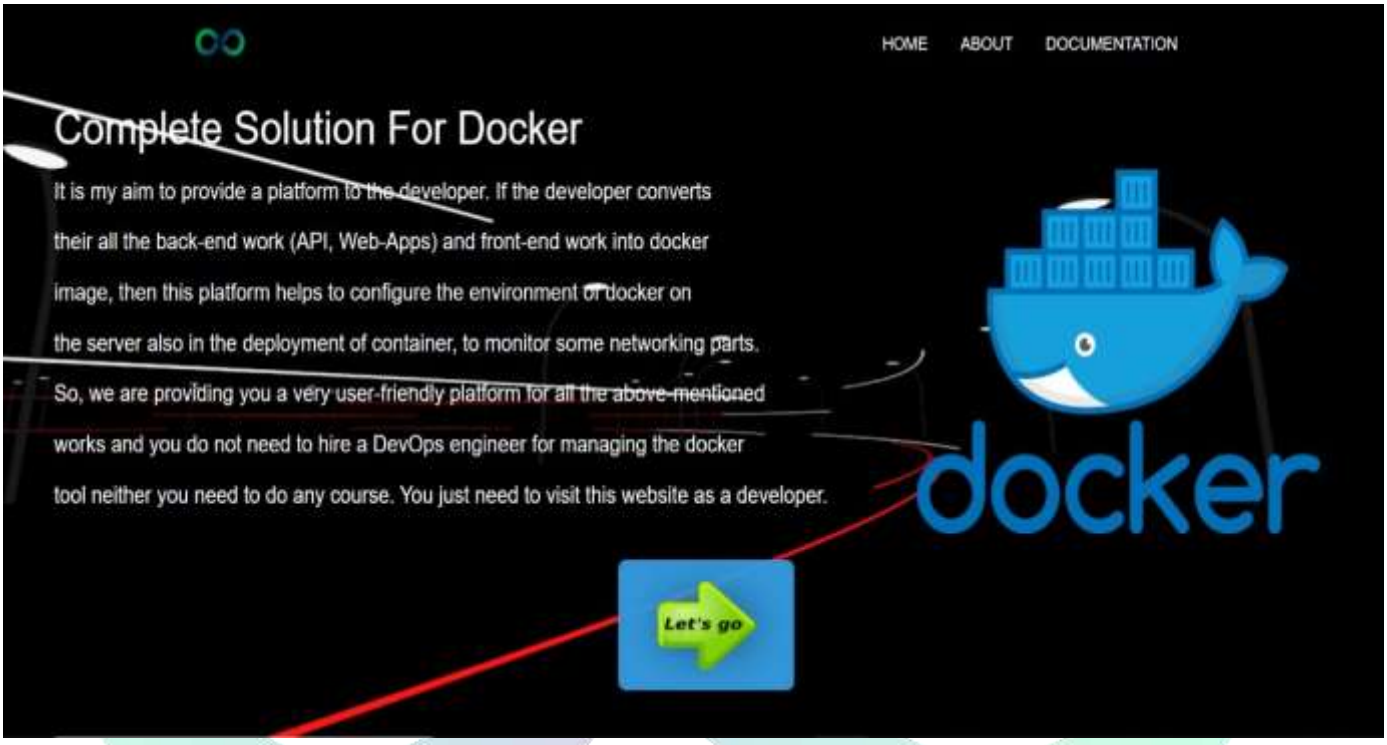
a) To pull the docker image
b) To push the docker image
c) To checkout the logs of docker
d) To manage the docker network
e) To list the containers

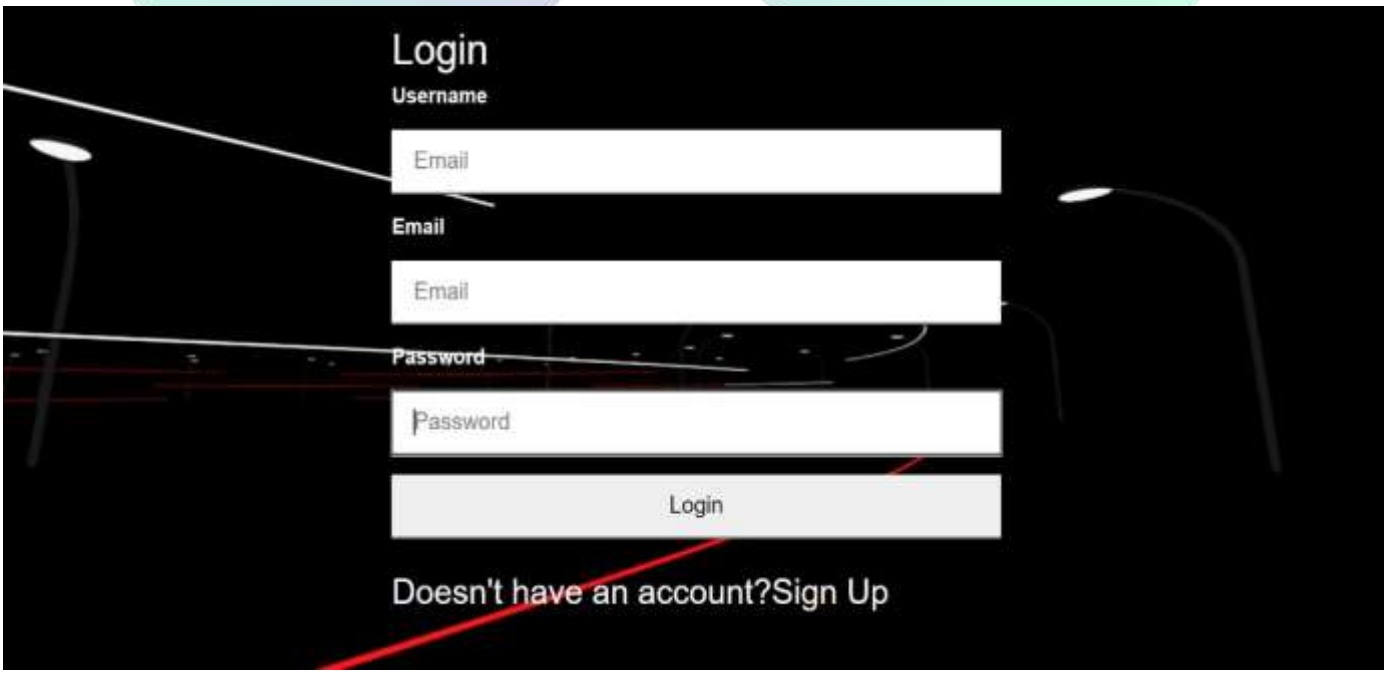
iii) They can manage many server here.

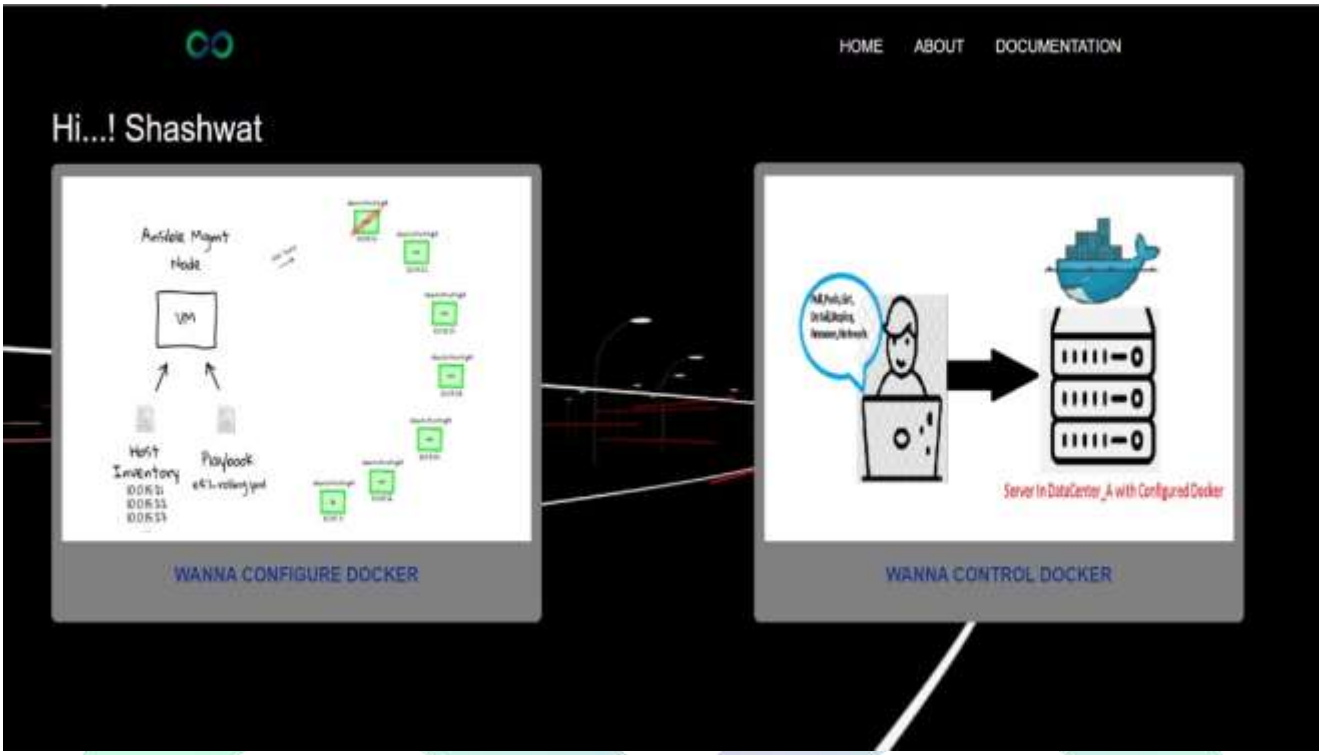


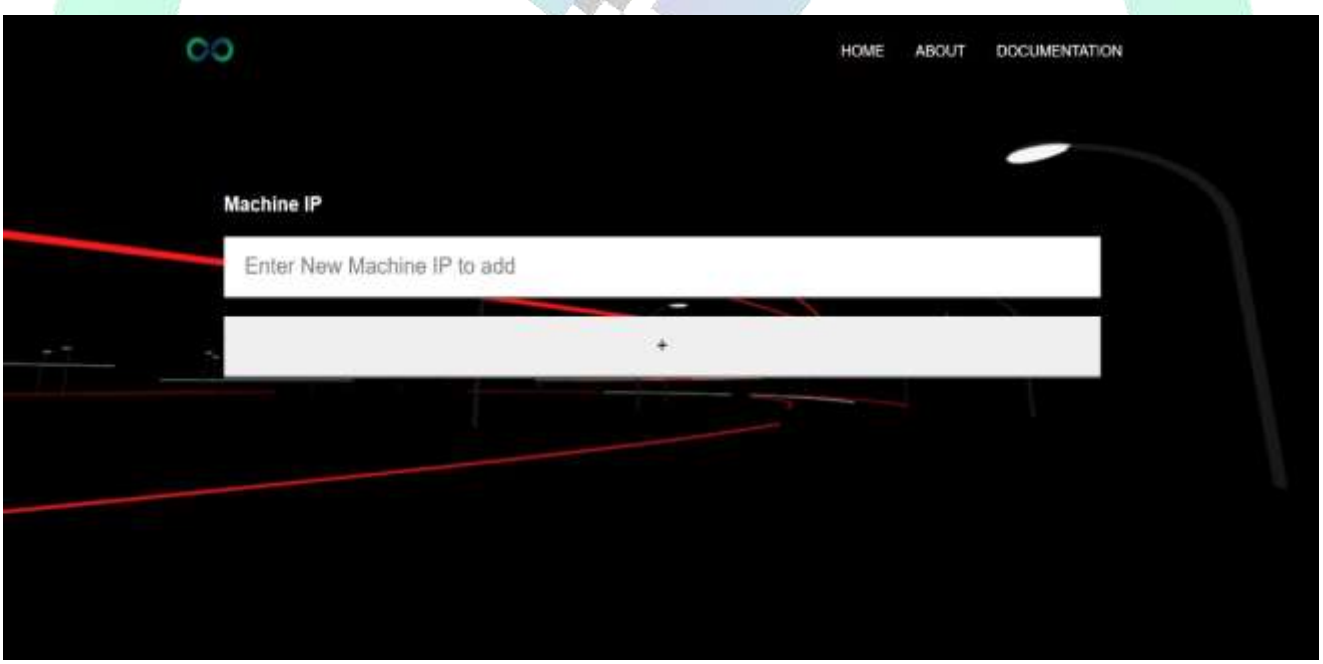
CHAPTER 4

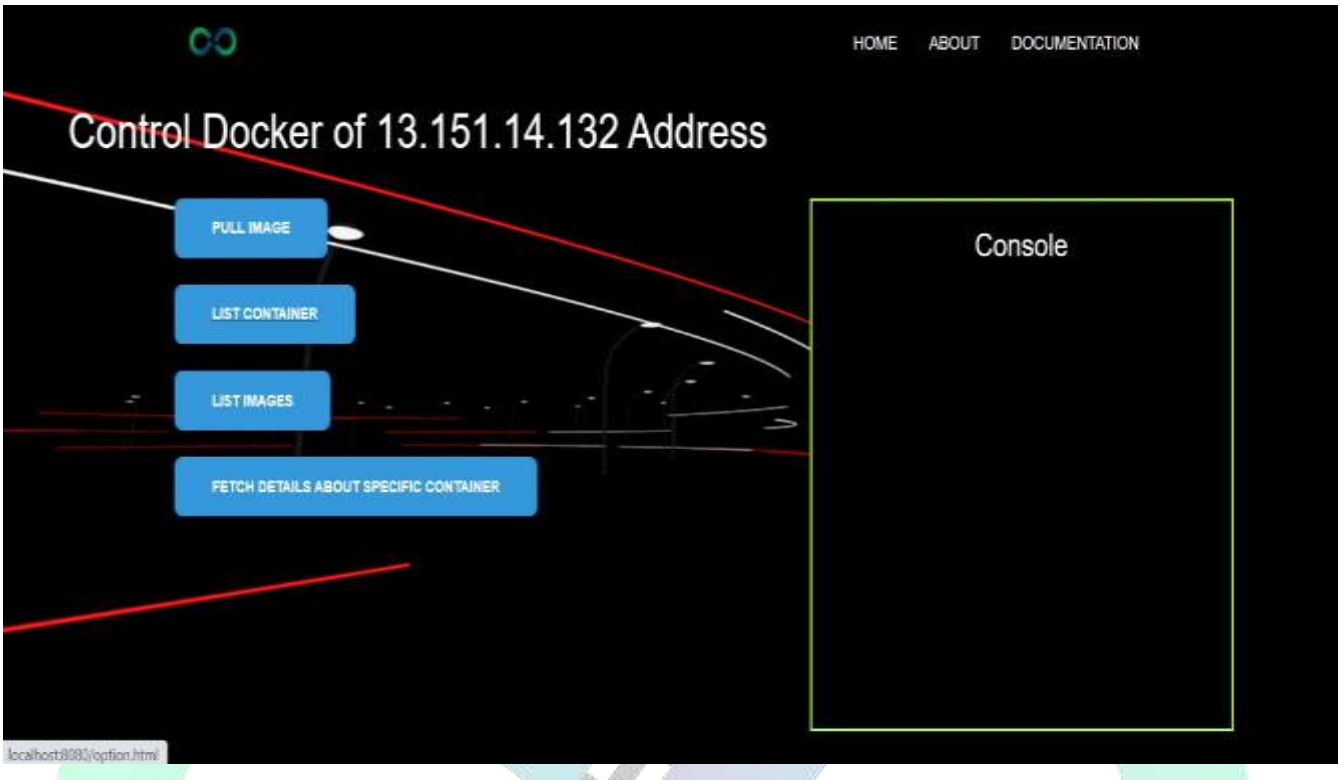
Project Samples





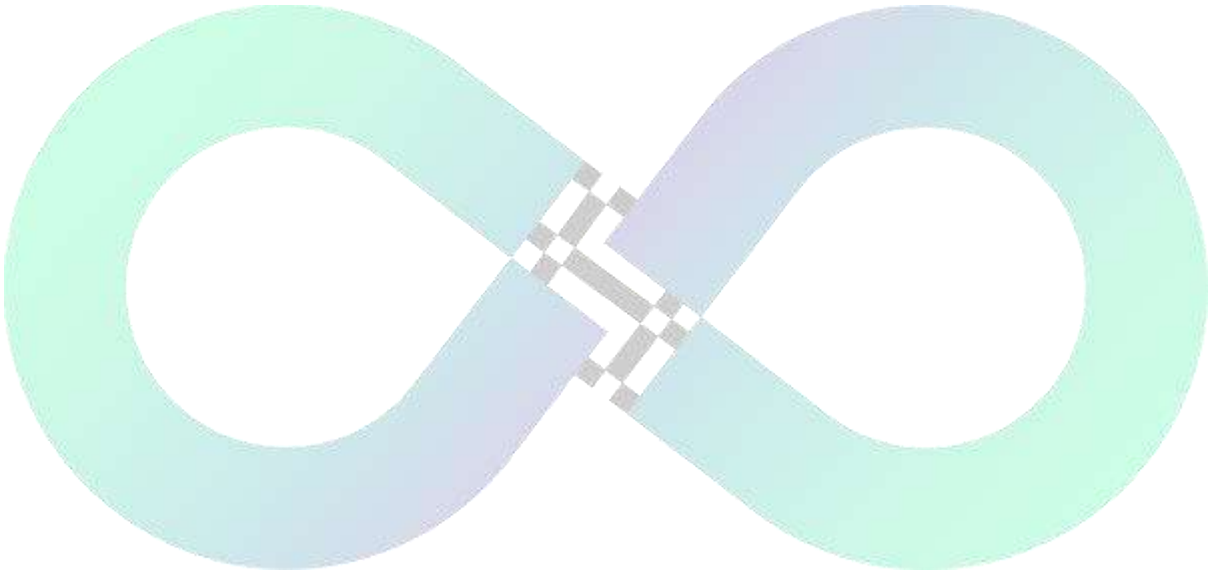

HOME
ABOUT
DOCUMENTATION
Hi...! Shashwat
Ansible Mgmt Node
VM
Host Inventory
Playbook
WANNA CONFIGURE DOCKER
Server In DataCenter_A with Configured Docker
WANNA CONTROL DOCKER


HOME
ABOUT
DOCUMENTATION
Machine IP
Enter New Machine IP to add
+


HOME
ABOUT
DOCUMENTATION
Control Docker of 13.151.14.132 Address
PULL IMAGE
LIST CONTAINER
LIST IMAGES
FETCH DETAILS ABOUT SPECIFIC CONTAINER
Console
localhost:8080/option.html

CHAPTER 5

GitHub Link

Checkout the repository here is the link.

https://github.com/Shashwatsingh22/DockerCompleteSolution