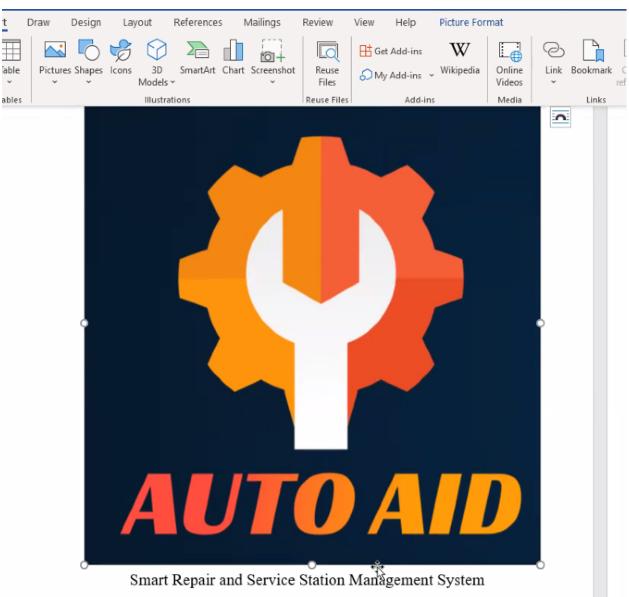
COVER PAGE
Deployment Instructions & Administration Manual



Autoaid Smart Repair station management System

Group 28
3rd year group project

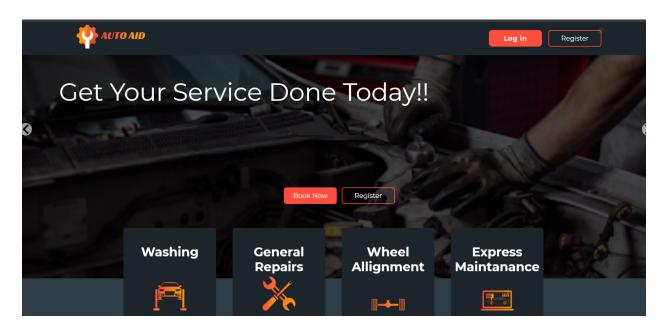


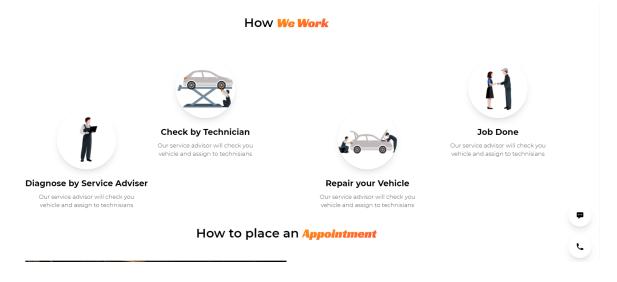
User Manual

Table of Content

Introduction to the Autoaid Application

AutoAid is a repair and service station management system which helps to provide efficient and reliable service to customers. By this, we provide smart systems for technicians, customers, and other staff of the repair and service station. AutoAid mainly consists of the appointment module, service management module, inventory handling module, staff handling module, finance and invoice module, and customer management module.





The demo is available at - http://autoaid.xyz/

Deployment Instructions

The Autoaid application is developed with the use technologies React js with Tailwind CSS for the front end and Spring Boot for the backend.





docker HUB

GitHub Link for Front End - https://github.com/dumidu1998/autoaid-front GitHub Link for Back End - https://github.com/dumidu1998/autoaid-API

Both React application and the Spring boot application are dockerized with the help of Dockerfile and every push to the main branch will create a new image of each application and push to the Docker Hub with the use of GitHub Actions.



Docker Hub link for Front End https://hub.docker.com/r/dumidu1998/autoaid front Docker Hub link for Back End https://hub.docker.com/r/dumidu1998/autoaid api

Setting Up for Development

Requirements

- React Js
- Java JDK 14
- IntelliJ Ultimate
- Mysql Server

Setting up for Front end Development

After the above requirements have been met:

1. Clone the repository and cd into it

git clone https://github.com/dumidu1998/autoaid-front.git cd autoaid-front

2. Install Dependencies

npm install

3. Setup Environmental Variables

Replace the URL in the declartion `REACT_APP_API_BASE_URL` with the URL of the Backend Endpoint

Eg = REACT_APP_API_BASE_URL=http://143.110.247.156:9009

4. Run the project

npm start

Setting up for Backend Development

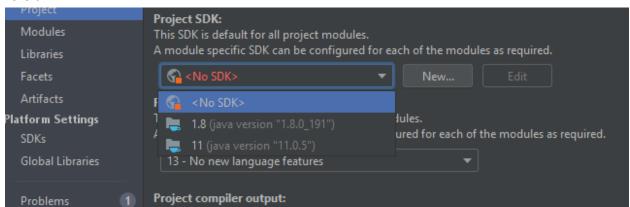
Clone the repository and cd into it

git clone https://github.com/dumidu1998/autoaid-front.git cd autoaid-front

Open the project folder with IntelliJ



Click on Add Configuration and Add new Spring Boot project configuration by selecting the java version



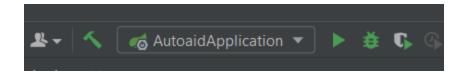
Then

Go to application.properties file and change the URL for the MySQL

spring.datasource.url = jdbc:mysql://localhost:3306/autoaid

spring.datasource.url = jdbc:mysql://localhost:3306/autoaid

Run the Application with Run button



Make sure to run the MySQL server in the development environment before starting the application.

If you need to change the port address of the backend, edit the application.properties file server.port = 9000

Once All done user can access the front end with http://localhost:3000

And the backend with http://localhost:9000

Deployment of the production Build

For the deployment of the production build, you need to have the below requirement

• VPS in DigitalOcean(Recommended) or any other service Provider

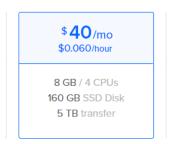
Minimum requirement

VPS with 4GB ram and 2 CPUs



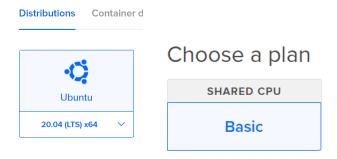
Recommended Requirement

VPS with 8 GB ram and 4 CPUs



Steps for the deployment in the DigitalOcean VPS

- 1.Login to the DigitalOcean account and open the form for creating a new Droplet
- 2. Choose the Distribution as ubuntu and VPS plan for Basic Shared CPU



3. Choose the datacenter region which is more closer to your location. (For Sri Lanka, Bangalore is ideal)



4. Select the Below Additional options

Select additional options 📳



IPv6

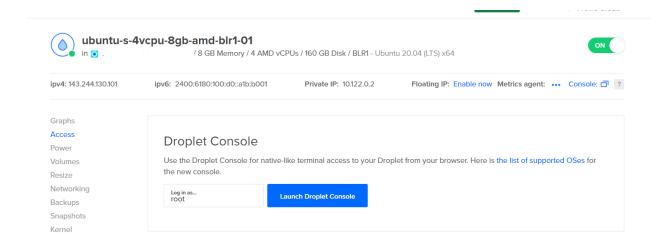


User data



Monitoring

- 5. Then Create the Droplet
- 6.Once done open the Droplet console or Access the Console with SSH



There is a bash Script written to automate the Docker installation including the docker containers MySQL, PHPMyadmin, Autoaid frontend and the backend. Once completed the application is up and running on the server.

7. For that you need to first clone the repository and cd to it

git clone https://github.com/dumidu1998/autoaid-front.git cd autoaid-front

8. Then the bash file for installing the application is here and you just need to run the bash file

bash install.sh

Once done you can access the application with the IP address followed by the port number 3000

Eg

http://143.244.130.101:3000/

To access the database using PHPMyAdmin visit your IP address with port 8899 Eg

http://143.244.130.101:8899/

The install script also installed Portainer.io which provides a simpler UI to manage the docker container. To access the Portainer, visit your IP address with port 9000 Eg

http://143.244.130.101:9000/

Band End is running on port 9009 http://143.244.130.101:9009 - backend

Below login Credentials are default credentials and you can use them to access the System

There are mainly 6 actors in the system and they have different dashboards.

Actor	Email	Username	Password
Customer	customer@gmail.com	Customer	customer123
Admin	admin@gmail.com	Admin	Staff123
Technician	technician@gmail.com	Technician	Staff123
Service Advisor	advisor@gmail.com	ServiceAdvisor	Staff123
Stock Keeper	skeeper@gmail.com	StockKeeper	Staff123
Cashier	cashier@gmail.com	Cashier	Staff123

If you need to set up the application for your own domain name, follow the instructions below.

Install Nginx

sudo apt install nginx

Create a file with your domain name inside the /etc/nginx/sites-available directory

Add following content to it

```
server {
    listen 80;
    listen [::]:80;

    root /var/www/acc;
    index index.html index.htm index.nginx-debian.html;

    server_name autoaid.com www.autoaid.com;

location / {
        proxy_pass http://localhost:3000;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
    }
}
```

Go to /etc/nginx/sites-enabled and run below command

sudo In -s /etc/nginx/sites-available/autoaid.com /etc/nginx/sites-enabled/

Restart the nginx server

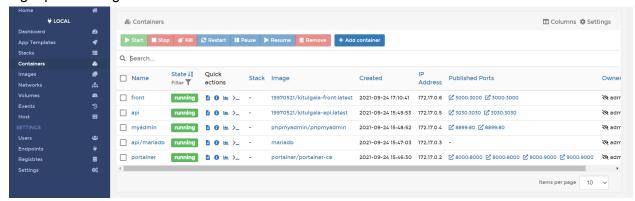
sudo systemctl reload nginx

System Administration Guide

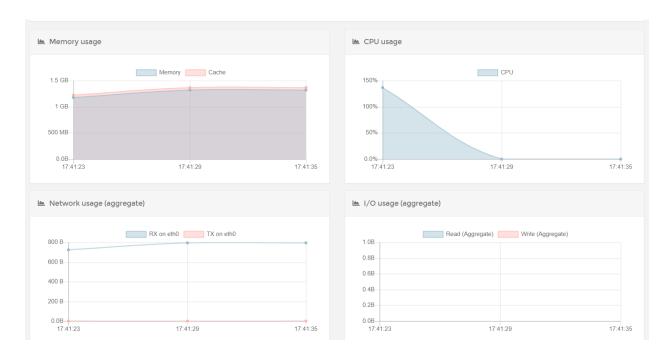
For managing the future versions and managing the containers access the Portainer console with the IP address with port 9000.

Eg - http://143.244.130.101:9000/

Signup and navigate to containers.

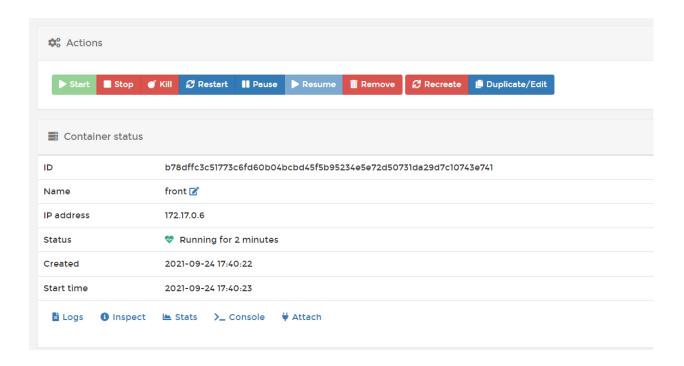


There you can see all the running docker containers in the VPS. You can see the status of them as well as logs and also you can attach to the containers and use command-line.

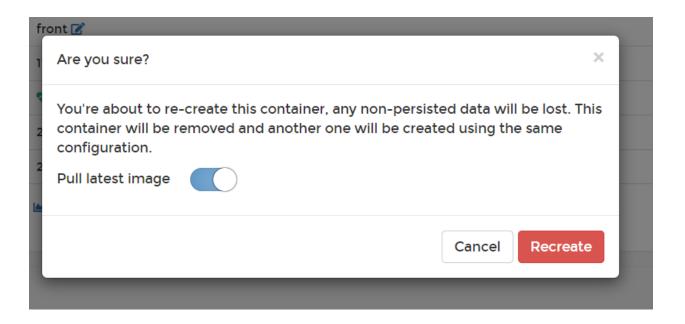


If you have updated the source code and you need to make those changes to the production, follow the below steps.

Click on the container and go to its page



Click on Recreate



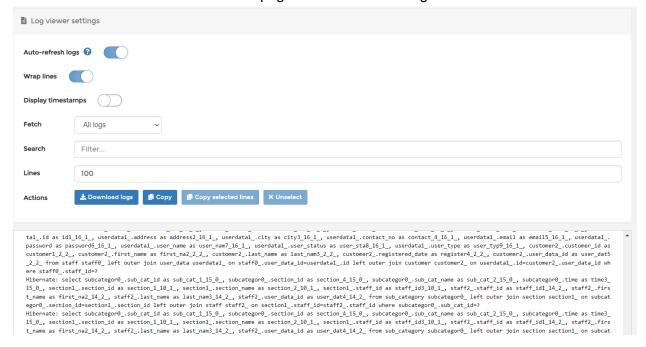
Enable 'pull latest image' and click recreate. After few seconds, the changes will apply!!

View logs in the spring boot.

Navigate to the container and click on the logs icons



Then the user will be redirected to the page which shows the logs from the date of start.



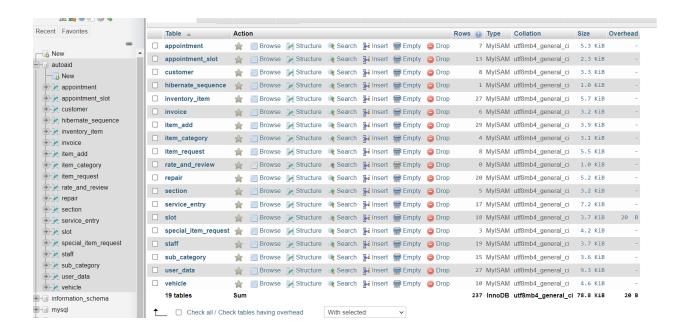
User can read them, search them or download the logs as a txt file.

Accessing the Database

For easy access to the database, Phpmyadmin is also installed. To access Phpmyadmin, visit port 8899 followed by the IP address Eg - http://143.244.130.101:8899/

Default username and passwords are Username - root Password - root

Once logged navigate to the autoaid database with the left side navigation panel.



If the system admin needs to remove any users, the admin needs to remove the related entry from the user_data table as well as the respective table. Eg if the customer, remove it from the customer table. If staff, remove from the staff table.

* All the passwords are hashed and are cannot be reversed or modified.

