**Steps to Deploy Docker Application**

Please find the below steps to run the Application in the local system -

1. Install Docker from hub.docker.com
2. Pull the Docker compose file from Github from the following url.
3. Remove the build tag from the file and replace it with image: srisaiomkar/amazon-products\_client and srisaiomkar/amazon-products\_server for client and server respectively.
4. Run the following command docker-compose up to setup and start the containers.
5. Go to localhost:4200 to view the web application UI.

**Application Design**

There are 3 components interacting with each other -

1. Client (Frontend )- Framework- Angular.js
2. Server (Backend)- Framework- Node.js and Express.js
3. Database - MongoDB/ MongoExpress

**Interaction of the Application Components -**

* Client Server and database run on seperate docker containers and interact with each other.
* The client/ frontend container sends the request to the backend container for getting the Amazon Product Categories.
* The Server then calls the API, fetches data and store the data into MongoDB database Container.
* The data is persisted in database through volumes.

Mongo Express

MongoDB

Docker Container- Server

Docker Container- CLIENT

SYSTEM ARCHITECTURE