Gmail **Nilay Gupta <nilayguptaforwork@gmail.com>**

assingment

Deepesh Mishra <mishradeepesh72@gmail.com> 17 November 2023 at 14:07
To: nilayguptaforwork@gmail.com

Docker assignment:

1. **Install Docker:**
   Ensure Docker is installed on your machine. You can download the Docker Desktop application from the official Docker website.

2. **Verify Installation:**
   Open a terminal or command prompt and run `docker --version` to ensure Docker is installed correctly.

3. **Pull a Docker Image:**
   Use the `docker pull` command to download a Docker image. For example, you can pull the official Nginx image:
   ```bash
   docker pull nginx
   ```

4. **Run a Container:**
   Start a container using the pulled image. For instance, to run Nginx on port 8080:
   ```bash
   docker run -d -p 8080:80 nginx
   ```

5. **Check Running Containers:**
   View the list of running containers with:
   ```bash
   docker ps
   ```

6. **Access Container Logs:**
   Inspect the logs of a running container:
   ```bash
   docker logs <container_id>
   ```

7. **Build a Docker Image:**
   Create a Dockerfile to define your custom image. For example, create a simple web app:
   ```Dockerfile
   FROM nginx
   COPY index.html /usr/share/nginx/html
   ```
   Build the image with:
   ```bash
   docker build -t my-web-app .
   ```

8. **Run Container from Custom Image:**
   Run a container using the newly built image:
   ```bash
   docker run -d -p 8081:80 my-web-app
   ```

9. **Push Image to Docker Hub:**
   Create an account on Docker Hub (https://hub.docker.com/), then push your custom image:
   ```bash
   docker login
   docker tag my-web-app username/my-web-app
   docker push username/my-web-app
   ```

10. **Explore Docker Compose:**
    Create a `docker-compose.yml` file to define a multi-container application. Use it to orchestrate multiple services, set up networks, and volumes.

11. **Clean Up:**
    Remove containers and images that are no longer needed:
    ```bash
    docker stop <container_id>
    docker rm <container_id>
    docker rmi <image_id>
    ```

Remember to tailor this assignment based on your specific goals or project requirements. Docker has extensive documentation that can be referenced for more in-depth exploration of its features.

Cheers,
Deepesh Mishra
AI/Ml/IOT- Expert
http://deepeshkmmishra.com/about-2/
https://www.linkedin.com/feed/
cell-+91 8442032741

[Quoted text hidden]