

Foundation Application: Frontend

Introduction

The Foundation Application's Frontend component is responsible for providing a user-friendly interface and interacting with users. It's designed to complement the frontend services by offering a seamless experience for end-users.

Features

- **Interactive User Interface:** Provides a responsive and interactive user interface for users to interact with the application.
- **Real-Time Updates:** Supports real-time updates to reflect changes made in the frontend or server-side operations.
- **Integration with frontend:** Integrates seamlessly with the frontend services to fetch and display data.

Getting Started

Prerequisites

Before you start, ensure you have the following installed:

- Docker and Docker Compose
- Jenkins with Pipeline and Docker plugins installed
- Git

Installation and Setup

Clone the Repository:

```
def sourceDir = "/home/naveen/Desktop/Projects/Application_Frontend_Foundation/"
```

```
    def destDir =  
"/home/naveen/.jenkins/workspace/Application_Frontend_Foundation/"
```

```
    sh "rsync -av --exclude='__pycache__/' ${sourceDir} ${destDir}" Jenkins Pipeline  
Setup:
```

Create a new Jenkins pipeline job.

Use the provided Jenkinsfile from the repository as the pipeline script.

Configuration

Environment Variables:

- `DOCKER_CMD`: The Docker command to use.
- `DOCKERFILE_PATH`: Path to the Dockerfile.
- `CONTAINER_PORT`: The port number for the Docker container.
- `IMAGE_TAG`: Tag for the Docker image.

API Keys and Secrets:


Store any API keys or secrets as environment variables in Jenkins.

Usage

The Jenkins pipeline automates several tasks:

- **Cloning the Repository**: Copies the project to the workspace.
- **Checking Dockerfile**: Verifies the existence of the Dockerfile.
- **Building the Docker Image**: Constructs the Docker image with a new tag.
- **Running the Image**: Deploys the frontend application using Docker Compose.
- **Listing Docker Images**: Displays all available Docker images.
- **Curl Test**: Performs a curl test to ensure the server is accessible.

To trigger the pipeline, push changes to your repository, or manually start the pipeline job in Jenkins.

 pipeline