



Project Report

CICD With Azure DevOps

Group Members

Syed Muhammed Hassan Ali	20k-1052
Ehtesham Zafar	20k-1655
Amna Mubarak	20k-1695
Hanzala	20k-0277

Submission Date: Jan 08, 2023

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Organization

DevopsFinalOrganization

Projects My work items My pull requests



DevOps Final Project

Recruitment System which allows you to have customized workflow for your jobs and tracking of applied candidates.



Project

Project details

Name

DevOps Final Project

Description

Recruitment System which allows you to have customized workflow for your jobs and tracking of applied candidates.

Process

Agile

Save



Team

DT

DevOps Final Project Team
The default project team.
Relevant links: [Notifications](#) | [Dashboards](#) | [Iterations and Area Paths](#)

Members

Settings

Search users and groups

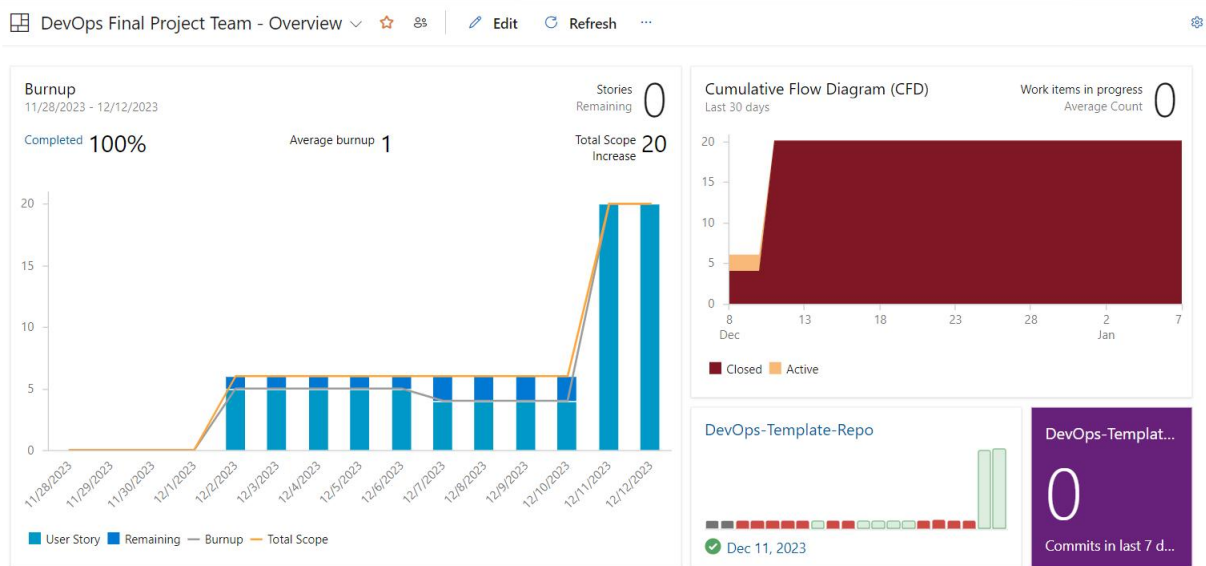
Total 4

Direct Members

Add

<input type="checkbox"/>	Name	Type	Username, Scope, or App Id
<input type="checkbox"/>	<div>AM</div> Amna Mubarak amnamubarakk111@gmail.com	user	amnamubarakk111@gmail.com
<input type="checkbox"/>	<div>EZ</div> Ehtesham Zafar ehteshamzafar2002@gmail.com	user	ehteshamzafar2002@gmail.com
<input type="checkbox"/>	<div>HB</div> Hanzala Bhutto bhutto.hanzala@gmail.com	user	bhutto.hanzala@gmail.com
<input type="checkbox"/>	<div>SA</div> Syed Muhammed Hassan Ali Admin hassansyedk20@outlook.com	user	hassansyedk20@outlook.com

Dashboard



Overview

DP

DevOps Final Project

Private

About this project

Liked 2

Recruitment System which allows you to have customized workflow for your jobs and tracking of applied candidates.

Tags

Backend Frontend SAAS Workflow Customizations Tracking Applicants

Project stats

Period: Last 30 days

Boards

43 Work items created

80 Work items completed

Repos

0 Pull requests opened

23 Commits by 4 authors

Pipelines

56%

Builds succeeded

Work Items

Work items

Recently completed + New Work Item Open in Queries Column Options Import Work Items Recycle Bin

Filter by keyword

Types Assigned to States Area Tags

ID	Title	Assigned To	State	Area Path	Tags
62	React Flow	Ehtesham Zafar	Closed	DevOps Final Project	
63	React Flow Integration	Ehtesham Zafar	Closed	DevOps Final Project	
26	Infrastructure	Hanzala Bhutto	Closed	DevOps Final Project	
25	Docker Setup	Syed Muhammed Hassan Ali	Closed	DevOps Final Project	
28	Job Management	Ehtesham Zafar	Closed	DevOps Final Project	
24	User Interface	Amna Mubarak	Closed	DevOps Final Project	
32	Analytical Dashboard	Amna Mubarak	Closed	DevOps Final Project	
55	Chatbot Integration	Syed Muhammed Hassan Ali	Closed	DevOps Final Project	
54	Job Analytics	Ehtesham Zafar	Closed	DevOps Final Project	
48	Setup react flow library	Ehtesham Zafar	Closed	DevOps Final Project	
42	Security Measures	Amna Mubarak	Closed	DevOps Final Project	

Sprints

Planning

Planning

Drag and drop work items to include them in a sprint.

DevOps Final Project Team Backlog



Sprint 1

Current

02/12/2023 - 17/12/2023

Planned Effort: -

10 working days

















 20  45

DevOps Final Project Team

2 December - 17 December
10 work days

Taskboard Backlog Capacity Analytics + New Work Item Column Options

Sprint 1 Person: All

Expand all	New	Active	Closed
 Job form			
 Docker-compose.yaml services			
 Schema config userstory			
 scorecard UI			
 Applicant details			
 chatbot UI			
 Assigne schema			
 assignee UI			
 Explore Logging Solutions			
 Environment-Specific Configurations			
 update profile			
 reactflow UI			
 Role-Based Access Control			
 JWT Tokens			
 Dockerfile Configuration			
 React Flow			
 Charts			
 Recruiter Dashboard			











Sprint Board

DevOps Final Project Team

2 December - 17 December
10 work days

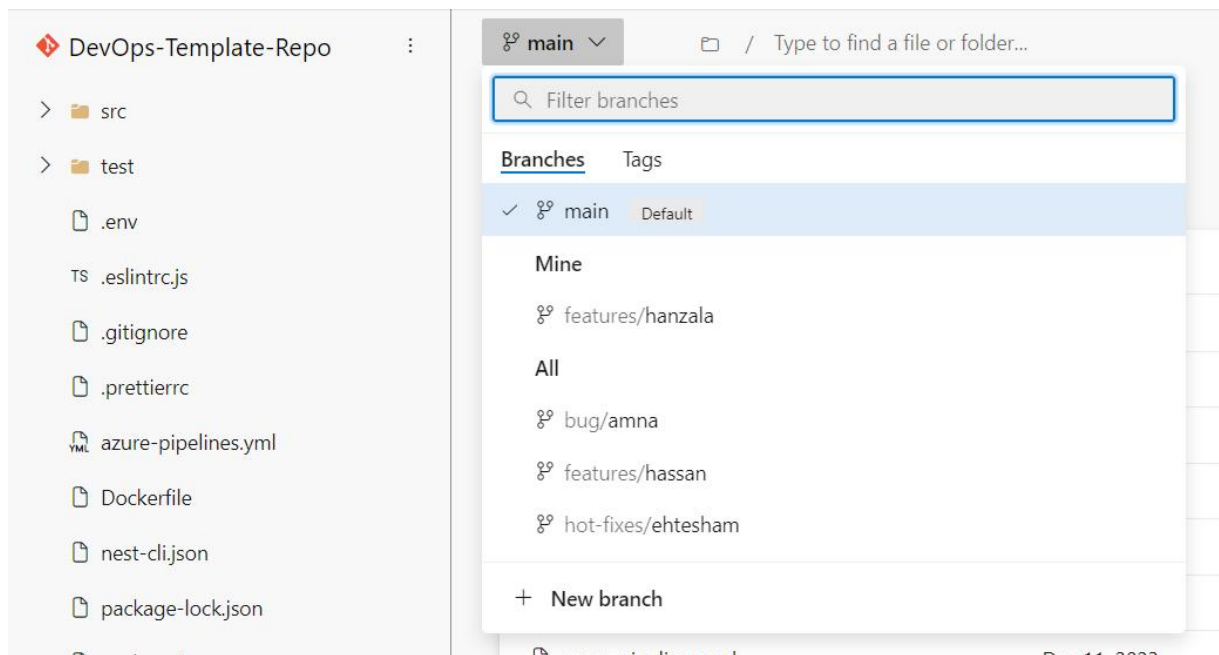
Taskboard Backlog Capacity Analytics + New Work Item Column Options

Sprint 1 Person: All

Collapse all	New	Active	Closed
 52 Job form Hanzala Bhutto State: Closed			 70 Use Tailwind Fields Hanzala Bhutto State: Closed
			 71 Attach a Picture Hanzala Bhutto State: Closed
			 72 Message Pop up For Success Hanzala Bhutto State: Closed
 73 Docker-compose.yaml services Syed Muhammed ... State: Closed			 74 Add nest app service Syed Muhammed ... State: Closed
			 75 Add postgres service Syed Muhammed ... State: Closed
			 76 Add redis service Syed Muhammed ... State: Closed
 77 Schema config userstory Ehtesham Zafar State: Closed			 78 Do schema config Ehtesham Zafar State: Closed

Repos

Branches



Commits By each Member Hassan Commit

Graph	Commit	Pull Request	Status
	added multi stages for build and deploy job 168da49c • Syed Muhammed Hassan Ali Dec 11, 2023 at 10:10 PM		✓ succeeded
	Update package path in azure-pipelines.yml 37367cf4 • Syed Muhammed Hassan Ali Dec 10, 2023 at 1:57 AM		✓ succeeded

Ehtesham Commits

	Merged PR 4: Removed .env config 5e6531d4 • Amna Mubarak Dec 2, 2023 at 3:41 PM	4	✗ failed
	Removed .env feeca55f • Amna Mubarak Dec 2, 2023 at 3:40 PM	4	
	readme updated d70e2c8c • Amna Mubarak Dec 1, 2023 at 7:52 PM	4	

Amna Commits

	Removed .env feeca55f • Amna Mubarak Dec 2, 2023 at 3:40 PM	4	
	readme updated d70e2c8c • Amna Mubarak Dec 1, 2023 at 7:52 PM	4	

Hanzala Commits

	workflow 02a143a3 • Hanzala Bhutto Dec 2, 2023 at 10:44 AM	5	
	Updated README.md 0f2abd73 • Hanzala Bhutto Dec 2, 2023 at 10:43 AM	5	

Pull Requests

Pull requests

New pull request

MineActiveCompletedAbandoned

Pull Request ID

Created by

Assigned to

Target branch

EZ

updated workflow

workflow

Ehtesham Zafar request 15 into 37 main

SA

0

Completed Dec 2, 2023

AM

Removed .env config

Amna Mubarak request 14 into 37 main

SA

0

Completed Dec 2, 2023

HB

DockerFile

Container

Hanzala Bhutto request 12 into 37 main

SA

0

Completed Dec 2, 2023

SA

Adding configuration in Dockerfile

Syed Muhammed Hassan Ali request 13 into 37 main

SA

0

Completed Dec 2, 2023

EZ

updated readme

C

Ehtesham Zafar request 11 into 37 main

EC

0

Completed Dec 1, 2023

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Pipelines

Pipelines

RecentAllRuns

Filter pipelines

Recently run pipelines

Pipeline	Last run
<div><div>✓</div>DevOps-Template-Repo</div>	<div>#20231211.1 • added multi stages for build and deploy job</div> <div>Individual CI for <div>main</div> 11m 27s</div>

Successful run Pipeline

← DevOps-Template-Repo

EditRun pipeline

RunsBranchesAnalytics

Description	Stages	
<div>#20231211.1 • added multi stages for build and deploy job</div> <div>Individual CI for <div>main</div> 168da49c</div>	<div>✓-✓</div>	<div>Dec 11, 2023</div> <div>11m 27s</div>
<div>#20231209.8 • Update package path in azure-pipelines.yml</div> <div>Individual CI for <div>main</div> 37367cf4</div>	<div>✓</div>	<div>Dec 10, 2023</div> <div>11m 14s</div>

Pipeline Info

✓ #20231211.1 • added multi stages for build and deploy job

Run new

This run is being retained as one of 3 recent runs by main (Branch).

View retention leases

SummaryCode CoverageAssociated pipelines

Triggered by

Syed Muhammed Hassan Ali

Repository and version

DevOps-Template-Repo

main 168da49c

Time started and elapsed

Dec 11, 2023 at 10:10 PM

11m 27s

Related

0 work items

1 published

Tests and coverage

Get started

View change

StagesJobs

✓ Build stage

1 job completed 1m 1s

1 artifact

✓ Deploy stage

1 job completed 10m 14s

Build Stage

←

Jobs in run #20231211.1

DevOps-Template-Repo

Build stage

▼

✓

Build

51s

✓

Initialize job

2s

✓

Checkout DevOps-Template-Repo...

2s

✓

Install Node.js

<1s

✓

npm install

19s

✓

npm run build

7s

✓

ArchiveFiles

9s

✓

PublishBuildArtifacts

8s

✓

Post-job: Checkout DevOps-Tem...

<1s

✓

Finalize Job

<1s

Deploy stage

>

✓

Deploy

10m 11s

Finalize build

✓

Report build status

<1s

✓

Build

1 Pool: [Azure Pipelines](#)

2 Image: [ubuntu-latest](#)

3 Agent: [Hosted Agent](#)

4 Started: Dec 11, 2023 at 10:10 PM

5 Duration: 51s

6

7 ▶ Job preparation parameters

8 📦 1 artifact produced

Deploy Stage

← Jobs in run #20231211.1
DevOps-Template-Repo

Build stage

> Build 51s

Deploy stage

▼ Deploy 10m 11s

Initialize job 1s

Checkout DevOps-Template-Repo... 1s

DownloadBuildArtifacts 4s

AzureWebApp 10m 3s

Post-job: Checkout DevOps-Tem... <1s

Finalize Job <1s

Finalize build

Report build status <1s

AzureWebApp

```
1 Starting: AzureWebApp
2 =====
3 Task      : Azure Web App
4 Description : Deploy an Azure Web App for Linux or Windows
5 Version    : 1.230.1
6 Author     : Microsoft Corporation
7 Help       : https://aka.ms/azurewebapptroubleshooting
8 =====
9 Got service connection details for Azure App Service: 'devopscicdtemplate'
10 Package deployment using ZIP Deploy initiated.
11 Deploy logs can be viewed at https://devopscicdtemplate.scm.azurewebsites.net/api/deployments/bcdf14e6-334a-4781-8cbc-f4a9f3917e84/log
12 Successfully deployed web package to App Service.
13 Successfully updated deployment History at https://devopscicdtemplate.scm.azurewebsites.net/api/deployments/331702315317155
14 App Service Application URL: https://devopscicdtemplate.azurewebsites.net
15 Finishing: AzureWebApp
```

Deployed URL

<https://devopscicdtemplate.azurewebsites.net/api>

Validation with API

devopscicdtemplate.azurewebsites.net/api#/auth/AuthController_create

Execute

Clear

Responses

Curl

```
curl -X 'POST' \
  'https://devopscicdtemplate.azurewebsites.net/api/auth/register' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "name": "sohaib",
    "email": "sohaib@gmail.com",
    "password": "sohaib"
  }'
```

Request URL

https://devopscicdtemplate.azurewebsites.net/api/auth/register

Server response

Code

Details

201

Response body

```
{
  "success": true,
  "data": {
    "name": "sohaib",
    "email": "sohaib@gmail.com"
  }
}
```

Download

Response headers

```
access-control-allow-origin: *
content-length: 66
content-type: application/json; charset=utf-8
date: Sun, 07 Jan 2024 16:37:48 GMT
```

Responses

Code

Description

Links

201

No links

POST

/api/auth/login

▼

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Pipeline Code

```
trigger:
- main

variables:
  vmImageName: 'ubuntu-latest'

stages:
- stage: Build
  displayName: Build stage
  jobs:
  - job: Build
    displayName: Build
    pool:
      vmImage: $(vmImageName)

    steps:
  - task: NodeTool@0
    inputs:
      versionSpec: '20.x'
      displayName: 'Install Node.js'

  - script: |
      npm install
      displayName: 'npm install'

  - script: |
      npm run build
      displayName: 'npm run build'

  - task: ArchiveFiles@2
    inputs:
      rootFolderOrFile: '$(System.DefaultWorkingDirectory)'
      includeRootFolder: false
      archiveType: 'zip'
      archiveFile: '$(Build.ArtifactStagingDirectory)/$(Build.BuildId).zip'
      replaceExistingArchive: true

  - task: PublishBuildArtifacts@1
    inputs:
      PathToPublish: '$(Build.ArtifactStagingDirectory)/$(Build.BuildId).zip'
      ArtifactName: 'drop'

- stage: Deploy
  displayName: Deploy stage
  dependsOn: Build
  condition: succeeded()
```

```

jobs:
- job: Deploy
  displayName: Deploy
  pool:
    vmImage: $(vmImageName)

steps:
- task: DownloadBuildArtifacts@1
  inputs:
    buildType: 'current'
    downloadType: 'single'
    artifactName: 'drop'
    downloadPath: '$(System.ArtifactsDirectory)'

- task: AzureWebApp@1
  inputs:
    azureSubscription: 'Microsoft Azure Sponsorship(XXXX-XXXX-XXXX-XXXX)'
    appType: 'webAppLinux'
    appName: 'devopscicdtemplate'
    package: '$(System.ArtifactsDirectory)/drop/$(Build.BuildId).zip'
    runtimeStack: 'NODE|20-lts'
    startUpCommand: 'npm run start:prod'

```

Code Explanation:

1. **Trigger:**
 - The pipeline is triggered on the "main" branch.
2. **Variables:**
 - Defines a variable **vmImageName** with the value 'ubuntu-latest'. This variable is used to specify the VM image for the build and deployment agents.
3. **Stages:**
 - **Build Stage:**
 - Displays the name "Build stage."
 - Contains a single job named "Build" with tasks to build and package the application.
 - Installs Node.js version 20.x.
 - Runs npm install and npm run build commands.
 - Archives the build artifacts into a ZIP file.
 - Publishes the ZIP file as a build artifact named 'drop.'
 - **Deploy Stage:**
 - Displays the name "Deploy stage."
 - Depends on the success of the Build stage.
 - Contains a single job named "Deploy" with tasks to download the build artifacts and deploy the application to an Azure Web App.
 - Downloads the 'drop' artifact from the Build stage.
 - Uses the AzureWebApp task to deploy the application to a web app named 'devopscicdtemplate' on Azure. The deployment package is the ZIP file produced in the Build stage. The runtime stack is set to Node.js 20 (LTS), and the startup command is 'npm run start:prod.'

Artifact Dropped

← Artifacts		
Published		
Name	Size	
▼ drop	47 MB	⋮
📎 33.zip	47 MB	

Azure App Service

Microsoft Azure portal.azure.com/#@hassanyedk20outlook.onmicrosoft.com/resource/subscriptions/ba33ccef-ca83-495f-9f5c-97d633601526/resourceGroups/demo...

Home > demonstrtg > devopscicdtemplate

Search resources, services, and docs (G+)

devopscicdtemplate Web App

Search

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Microsoft Defender for Cloud
- Events (preview)

Deployment

- Deployment slots
- Deployment Center

Settings

- Configuration
- Authentication
- Application Insights
- Identity
- Backups
- Custom domains
- Certificates
- Networking
- Scale up (App Service plan)
- Scale out (App Service plan)
- Carroll's Provisioner

Essentials

Resource group (mzval) : demonstrtg

Status : Running

Location (mzval) : East US

Subscription (mzval) : Microsoft Azure Sponsorship

Subscription ID : ba33ccef-ca83-495f-9f5c-97d633601526

Tags (add) : devopscicdname : devopscicdvalue

Default domain : devopscicdtemplate.azurewebsites.net

App Service Plan : ASP-demonstrtg-989e (B1: 1)

Operating System : Linux

Health Check : Not Configured

Properties

Monitoring

Logs

Capabilities

Notifications

Recommendations

Web app

Name : devopscicdtemplate

Publishing model : Code

Runtime Stack : Node - 20-lts

Deployment Center

Deployment logs

Last deployment : Successful on Monday, December 11, 10:21:57 PM Refresh

Deployment provider : VSTRM

Domains

Default domain : devopscicdtemplate.azurewebsites.net

Custom domain : Add custom domain

Hosting

Plan Type : App Service plan

Name : ASP-demonstrtg-989e

Operating System : Linux

Instance Count : 1

Application Insights

Name : Enable Application Insights

Networking

Virtual IP address : 20.119.16.45

Outbound IP addresses : 20.253.40.35, 20.253.40.43, 20.253.40.46, ... Show More

Additional Outbound IP addresses : 20.253.40.35, 20.253.40.43, 20.253.40.46, ... Show More

Virtual network integration : Not configured

Microsoft Azure portal.azure.com/#@hassanyedk20outlook.onmicrosoft.com/resource/subscriptions/ba33ccef-ca83-495f-9f5c-97d633601526/resourceGroups/demo...

Home > Resource groups > demonstrtg > devopscicdtemplate

devopscicdtemplate Web App

Search

Scale up (App Service plan)

Service Connector

Locks

App Service plan

- App Service plan
- Quotas
- Change App Service plan

Development Tools

- SSH
- Advanced Tools

API

- API Management
- API definition

CORS

Monitoring

- Alerts
- Metrics
- Logs
- Advisor recommendations
- Health check
- Diagnostic settings
- App Service logs
- Log stream

Automation

Log stream

Reconnect

Copy

Pause

Clear

```
connecting...
2024-01-07T16:41:04 Welcome, you are now connected to log-streaming service.
Starting Log Tail -n 10 of existing logs ----/appsvc/volatile/logs/runtime/c78fc8959fa8091290dea81f3a06d4ffdd72ff651db088fdac28e1a775a4b6ac.log
2024-01-07T16:37:09.47211819Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:09 PM LOG Request GET /api/swagger-ui-init.js
2024-01-07T16:37:09.52976925Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:09 PM LOG Request GET /api/swagger-ui-standalone-preset.js
2024-01-07T16:37:10.43228293Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:10 PM LOG Request GET /api/swagger-ui-init.js
2024-01-07T16:37:10.767312006Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:10 PM LOG Request GET /api/swagger-ui-standalone-preset.js
2024-01-07T16:37:11.98244148Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:11 PM LOG Request GET /api/swagger-ui-bundle.js
2024-01-07T16:37:11.99516118Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:11 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:37:15.20690547Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:15 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:37:19.839677516Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:19 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:37:24.085603316Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:24 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:37:49.03387074Z: [INFO] [Nest] 94 - 01/07/2024, 4:37:49 PM LOG Request POST /api/auth/registerEnding Log Tail of existing logs ---Starting Live Log Stream ---
2024-01-07T16:41:19.968774937Z: [INFO] [Nest] 94 - 01/07/2024, 4:41:19 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:41:20.225996156Z: [INFO] [Nest] 94 - 01/07/2024, 4:41:20 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:41:20.456789489Z: [INFO] [Nest] 94 - 01/07/2024, 4:41:20 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:41:20.909538191Z: [INFO] [Nest] 94 - 01/07/2024, 4:41:20 PM LOG Request GET /api/favicon-32x32.png
2024-01-07T16:41:22.264028770Z: [INFO] [Nest] 94 - 01/07/2024, 4:41:22 PM LOG Request GET /api/user/FindAll
```