Experiment 10

Aim - Deploy full-stack apps using **DevOps tools and Docker.**

Code -

```
# server/Dockerfile
FROM node:18
WORKDIR /app
COPY package*.json ./
RUN npm install
COPY . .
EXPOSE 5000
CMD ["npm", "start"]
```

Fig 1.1 - Server side Dockerfile

```
version: '3'
services:
  client:
    build: ./client
    ports:
      - "3000:3000"
    depends_on:
      - server

  server:
    build: ./server
    ports:
      - "5000:5000"
    environment:
      - PORT=5000
    depends_on:
      - mongo

  mongo:
    image: mongo
    ports:
      - "27017:27017"
    volumes:
      - mongo-data:/data/db

volumes:
  mongo-data:
```

Fig 1.2 - DockerCompose file

```
git init

git add .

git commit -m "Initial full-stack Docker deployment"

git remote add origin https://github.com/your-username/your-repo.git

git push -u origin main
```

Fig 1.3 - Git commands to push code to github

Nikhil's workspace ⇕   ⊕ TravList ⌄   🔍 Search ⌃ K   + New   ⚡ Upgrade   ?

Settings

General

Name
A unique name for your Web Service. | TravList |

                                                                                      ✎ Edit

Region
Your services in the same region can communicate over a private | Oregon (US West) |
network.

Instance Type   Free   0.1 CPU   512 MB   Update

                                     ⓘ Please enter your payment information to select an instance type with higher limits.

ⓘ See remaining free usage, or learn about free service limits.

Build & Deploy

Repository
The repository used for your Web Service. | https://github.com/NikhilSKale/Travel-Listing |

                                                                                      ✎ Edit

Fig 2.1 - Configure Deployment Settings

Branch
The Git branch to build and deploy.

main

✎ Edit

Git Credentials
User providing the credentials to pull the repository.

nickkale815@gmail.com (you)

Use My Credentials

Root Directory Optional
If set, Render runs commands from this directory instead of the repository root.
Additionally, code changes outside of this directory do not trigger an auto-
deploy. Most commonly used with a monorepo.

✎ Edit

Build Filters
Include or ignore specific paths in your repo when determining whether to trigger
an auto-deploy. Paths are relative to your repo's root directory. Learn more.

✎ Edit

Included Paths
Changes that match these paths will trigger a new build.

+ Add Included Path

Ignored Paths
Changes that match these paths will not trigger a new build.

+ Add Ignored Path

Build Command
Render runs this command to build your app before each deploy.

$ npm install

✎ Edit

Pre-Deploy Command Optional
Render runs this command before the start command. Useful for database
migrations and static asset uploads.

$

✎ Edit

Start Command
Render runs this command to start your app with each deploy.

$ node app.js

✎ Edit

Auto-Deploy
By default, Render automatically deploys your service whenever you update its
code or configuration. Disable to handle deploys manually. Learn more.

Off

✎ Edit

Deploy Hook
Your private URL to trigger a deploy for this server. Remember to keep this a
secret.

⟳ Regenerate hook

Fig 2.2 - Configure Github(branch), set run command

Fig 2.3 - Logs

Output -

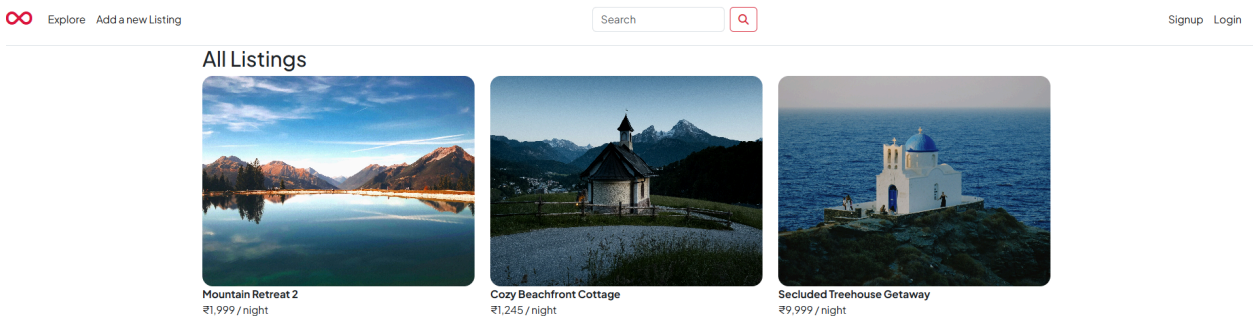Fig 3.1 - Deployment Status
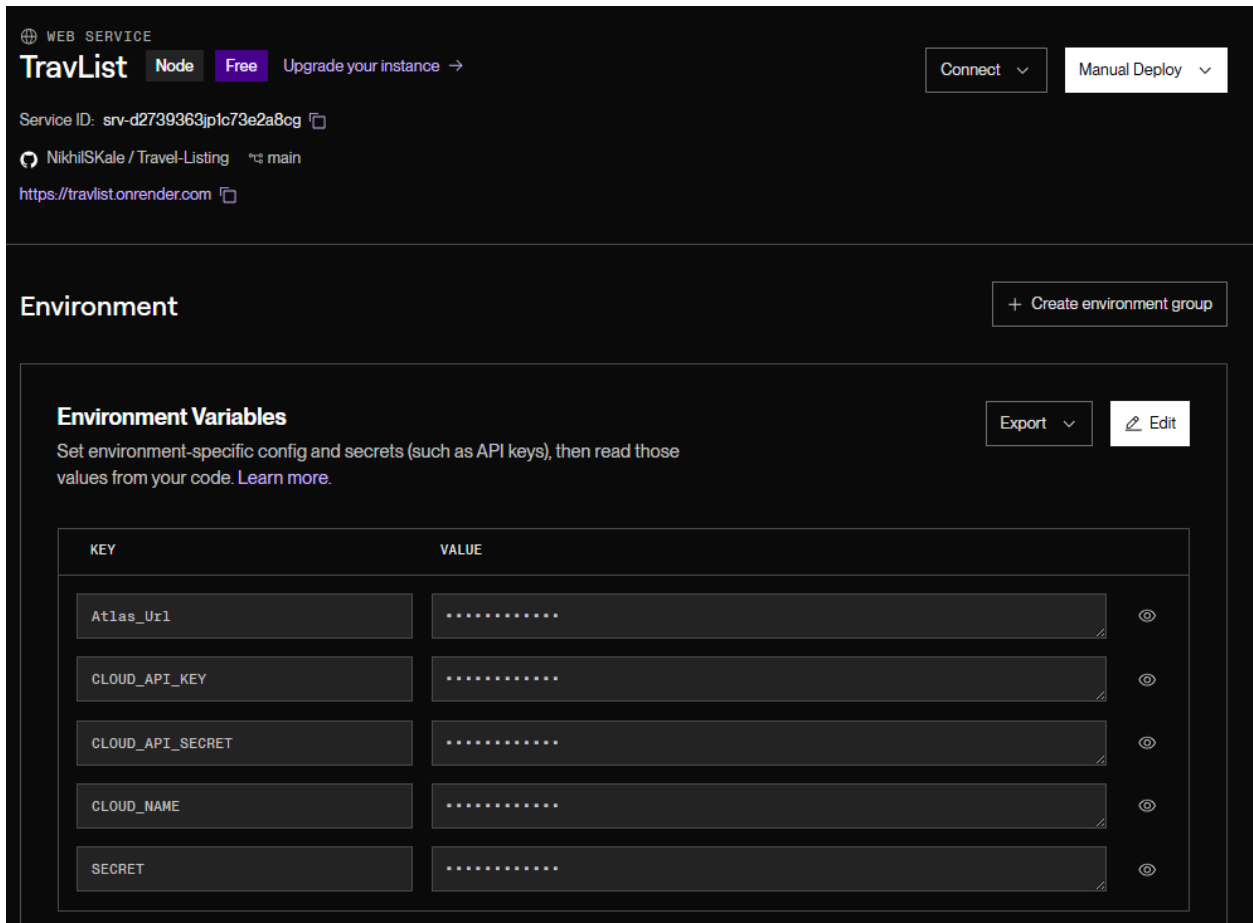
Fig 3.2 - Setup Environment variables

Fig 3.3 - Successful deployment

Fig 4.1 - Dashboard of Website