How to deploy our Vite React project to the Github as Github Pages

by Rushi's Multi-Code Quest

```
To create a Vite project, connect it with GitHub, and deploy it to GitHub
Pages:
```

---

1. Create a New Vite Project

1. **Install Vite**
   Ensure you have Node.js installed. Then run:

   ```
   npm create vite@latest my-vite-app
   ```

   - Replace `my-vite-app` with your project name.
   - Select the framework (e.g., React, Vue, etc.) and variant (e.g., TypeScript or JavaScript).

2. **Navigate to Your Project Folder**

   ```
   cd my-vite-app
   ```

3. **Install Dependencies**

   ```
   npm install
   ```

4. **Test Your Project**
   Start the development server to confirm it's working:

   ```
   npm run dev
   ```

---

2. Initialize a Git Repository and Push to GitHub

1. **Initialize Git**

```
git init
```

2. **Add All Files and Commit**

```
git add .
git commit -m "Initial commit"
```

3. **Create a GitHub Repository**
   - Go to [GitHub](#).
   - Create a new repository with the same name as your project.

4. **Add the Remote Repository**

```
git remote add origin https://github.com/<username>/<repository-
name>.git
```

5. **Push the Code to GitHub**

```
git branch -M main
git push -u origin main
```

Deploying a Vite website to GitHub Pages using `gh-pages` involves a few steps:

Step 1: Configure your `vite.config.js`

Update your Vite configuration file to include a `base` option. This is necessary because GitHub Pages serves files from a subdirectory.

1. Open your `vite.config.js` file.
2. Add the `base` property with the repository name:

```
import { defineConfig } from 'vite';

export default defineConfig({
  base: '/<repository-name>/', // Replace with your GitHub repository
```

```
    name
  });
```

Step 2: Install `gh-pages`

Install the `gh-pages` package to manage the deployment process:

```
npm install gh-pages --save-dev
```

Step 3: Update `package.json` Scripts

Add the following scripts to your `package.json`:

```json
"scripts": {
  "build": "vite build",
  "predeploy": "npm run build",
  "deploy": "gh-pages -d dist"
}
```

- `predeploy`: Builds your project before deploying.
- `deploy`: Uses `gh-pages` to publish the `dist` folder.

Step 4: Build and Deploy

Run the following commands to deploy your site:

1. Build your project:

   ```
   npm run build
   ```

2. Deploy it to GitHub Pages:

   ```
   npm run deploy
   ```

Step 5: Verify GitHub Pages Deployment

1. Go to your GitHub repository.
2. Navigate to **Settings > Pages**.
3. Ensure the source is set to the `gh-pages` branch.
4. Wait for a few minutes, and your site should be live at:

```
https://<username>.github.io/<repository-name>/
```