

COMSATS UNIVERSITY ISLAMABAD, ATTOCK CAMPUS

LAB MID



(TASK- 17)

NAME	MUHAMMAD HASEEB
REG NO	SP21-BCS-020
SUBJECT	ToCS
SUBMITTED TO	DR FARHAN AADIL
DATE	26-04-2024

Step-by-Step Guide: Deploying a Jamstack (Gatsby) Serverless Site with Vercel

Introduction

In this guide, you will learn how to deploy a Gatsby site using Vercel. This process involves setting up a Gatsby project, customizing it according to your needs, containerizing it with Vercel, and deploying it to make it accessible to all users.

Prerequisites

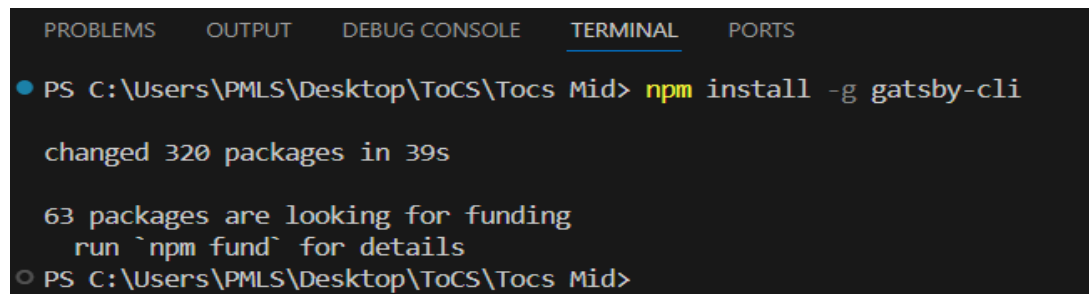
Before you begin, make sure you have the following prerequisites:

- Node.js installed on your machine
- A Vercel account (you can sign up at <https://vercel.com>)

Step 1: Install Gatsby

1. Open your terminal.
2. Run the following command to install Gatsby globally:

```
npm install -g gatsby-cli
```



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

● PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid> npm install -g gatsby-cli

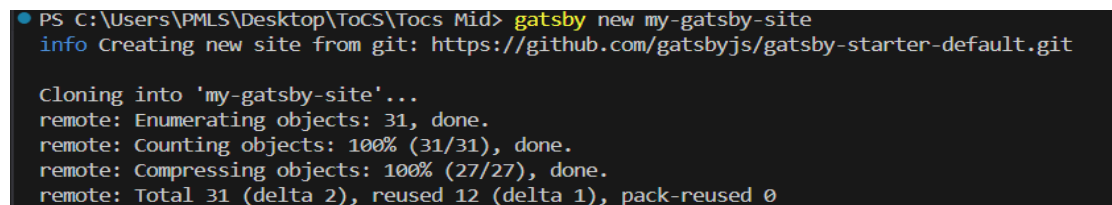
changed 320 packages in 39s

63 packages are looking for funding
  run `npm fund` for details
○ PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid>
```

Step 2: Create a New Gatsby Project

1. Navigate to the directory where you want to create your Gatsby project.
2. Run the following command to create a new Gatsby project:

```
gatsby new my-gatsby-site
```



```
● PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid> gatsby new my-gatsby-site
info Creating new site from git: https://github.com/gatsbyjs/gatsby-starter-default.git

Cloning into 'my-gatsby-site'...
remote: Enumerating objects: 31, done.
remote: Counting objects: 100% (31/31), done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 31 (delta 2), reused 12 (delta 1), pack-reused 0
```

3. Navigate into the newly created directory:

```
cd my-gatsby-site
```

```
PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid> cd my-gatsby-site
```

4. Access site on web

```
PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid\my-gatsby-site> gatsby develop
success compile gatsby files - 3.060s
success load gatsby config - 0.068s
success load plugins - 0.911s
success onPreInit - 0.005s

success initialize cache - 0.098s
success copy gatsby files - 0.556s
success Compiling Gatsby Functions - 0.453s
success onPreBootstrap - 0.496s
success createSchemaCustomization - 0.018s
success Checking for changed pages - 0.002s

success source and transform nodes - 0.252s

success building schema - 0.450s
success createPages - 0.085s
success createPagesStatefully - 0.283s
info Total nodes: 43, SitePage nodes: 8 (use --verbose for breakdown)

success Checking for changed pages - 0.011s
success write out redirect data - 0.013s
success Build manifest and related icons - 0.321s
success onPostBootstrap - 0.355s
info bootstrap finished - 10.830s

success onPreExtractQueries - 0.005s
```

You can now view **gatsby-starter-default** in the browser.

<http://localhost:8000/>

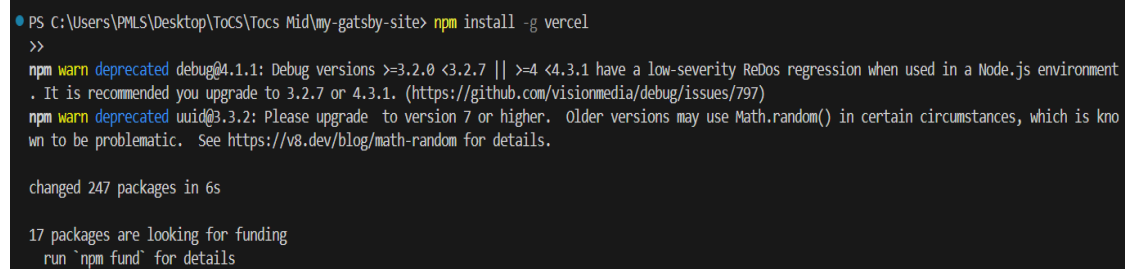
Step 3: Customize Your Gatsby Site

1. Open the project directory in your code editor.
2. Customize the site according to your needs by modifying the pages, components, and styles.
- 3.

Step 4: Containerize with Vercel

1. Install the Vercel CLI globally by running the following command:

```
npm install -g vercel
```



```
PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid\my-gatsby-site> npm install -g vercel
>>
npm warn deprecated debug@4.1.1: Debug versions >=3.2.0 <3.2.7 || >=4 <4.3.1 have a low-severity ReDos regression when used in a Node.js environment
. It is recommended you upgrade to 3.2.7 or 4.3.1. (https://github.com/visionmedia/debug/issues/797)
npm warn deprecated uuid@3.3.2: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain circumstances, which is known
to be problematic. See https://v8.dev/blog/math-random for details.

changed 247 packages in 6s

17 packages are looking for funding
  run `npm fund` for details
```

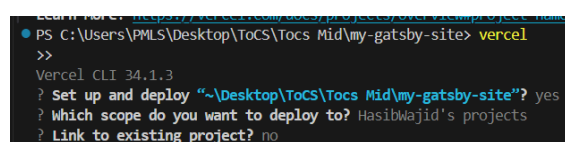
2. Log in to your Vercel account using the CLI:

```
vercel login
```

(You can Login via github)

3. Once logged in, navigate to your Gatsby project directory in the terminal.
4. Run the following command to deploy your project with Vercel:

```
vercel
```



```
PS C:\Users\PMLS\Desktop\ToCS\Tocs Mid\my-gatsby-site> vercel
>>
Vercel CLI 34.1.3
? Set up and deploy "~/Desktop/ToCS/Tocs Mid/my-gatsby-site"? yes
? Which scope do you want to deploy to? HasibWajid's projects
? Link to existing project? no
```

5. Follow the prompts to select your scope, project name, and directory.

```
? What's your project's name? serverless_site_using_gatsby_and_vercel
? In which directory is your code located? ./
Local settings detected in vercel.json:
Auto-detected Project Settings (Gatsby.js):
- Build Command: gatsby build
- Development Command: gatsby develop --port $PORT
- Install Command: 'yarn install', 'pnpm install', 'npm install', or 'bun install'
- Output Directory: public
? Want to modify these settings? no
🔗 Linked to hasibwajids-projects/serverless_site_using_gatsby_and_vercel (created .vercel and added it to .gitignore)
🔍 Inspect: https://vercel.com/hasibwajids-projects/serverless_site_using_gatsby_and_vercel/8Qx4ydw8pHvVTfCiuBUoEq2tucd [2s]
✅ Production: https://serverlesssiteusinggatsbyandvercel-81crt2ueh.vercel.app [2s]
🚀 Deployed to production. Run 'vercel --prod' to overwrite later (https://vercel.link/2F).
💡 To change the domain or build command, go to https://vercel.com/hasibwajids-projects/serverless_site_using_gatsby_and_vercel/settings
PS C:\Users\PMLS\Desktop\TOCS\Tocs Mid\my-gatsby-site>
```

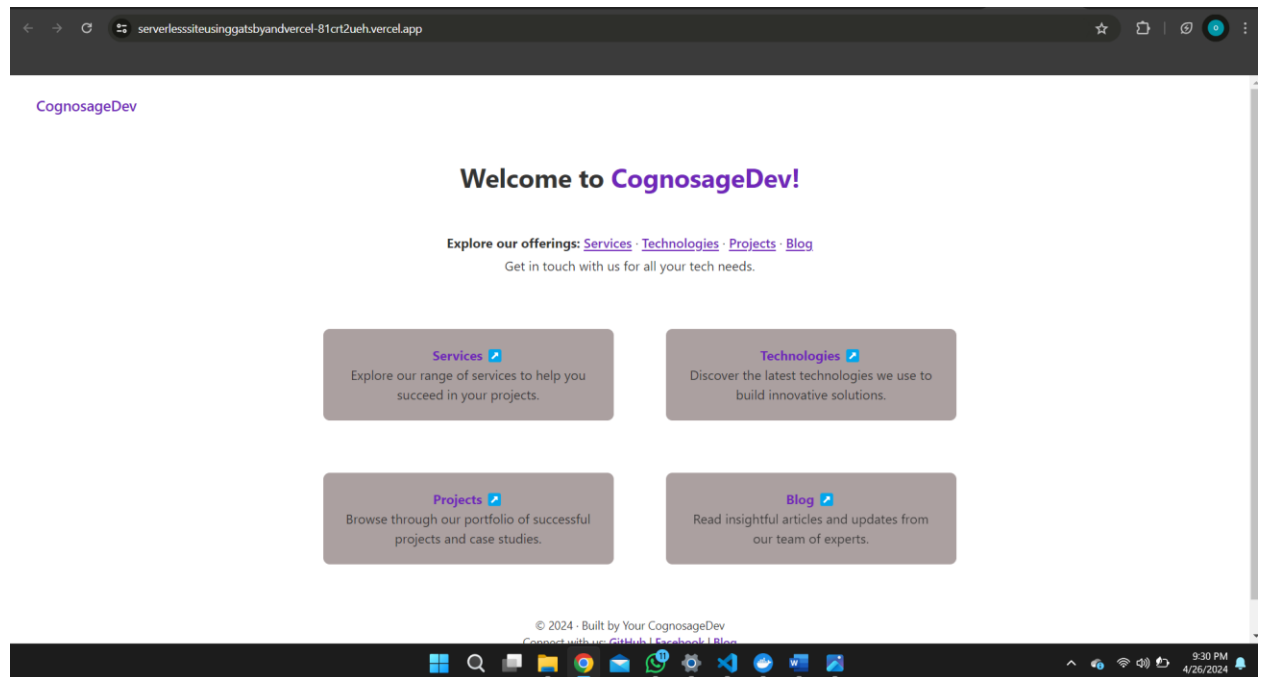
Step 5: Deploy Your Gatsby Site

1. After the deployment process is complete, Vercel will provide you with a URL for your deployed site.

```
✅ Production: https://serverlesssiteusinggatsbyandvercel-81crt2ueh.vercel.app [2s]
```

2. Share this URL with others to make your Gatsby site accessible to all users.

Will be accessible like this, but might look not similar to this as this was customized a bit.



Conclusion

Congratulations! You have successfully deployed your Gatsby site using Vercel. You can now share your site with others and start reaching a wider audience.