Thank-A-Teacher

Installation Guide

Version 2.0

12/01/2025

Local Deployment

The following is a guide on how to run the project on your local device.

Prerequisites

1. Install Node.js and npm

a. Download and install Node.js: https://nodejs.org/en/download
   i. You can use either method on this page, though it is recommended that you select the prebuilt option provided for your operating system for simplicity.

b. Confirm that Node.js has been installed by running the following in your command line:

```
node –version
npm –version
```

   i. If it has been installed properly, you will see a version number displayed.

2. Clone the Repository

c. Navigate to a preferred directory in your command line. Run the lines below in your preferred location:

```
git clone https://github.com/CS-3312-Group-1/JIA-5301-Thank-A-TA.git
cd Thank-A-Teacher
```

Installation

1. Install Dependencies

a. Run the following command in the project root to install all required packages:

```
npm install
```

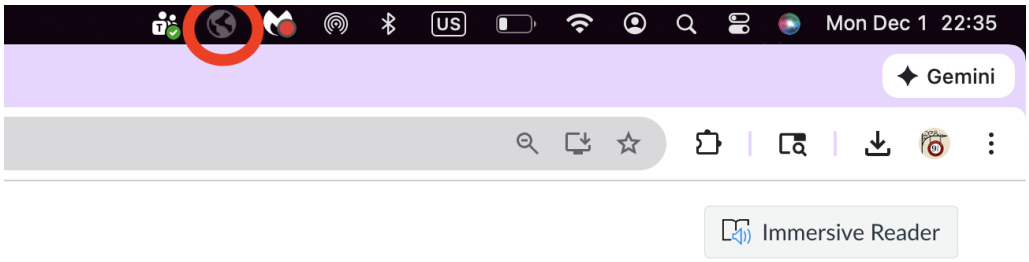
b. For any dependency errors/library references, please refer to Troubleshooting.

Running the Application

1. Connect to the Georgia Tech VPN

a. If you do not have access to the GT VPN Client, download it here: https://vpn.gatech.edu/global-protect/getsoftwarepage.esp

a. Select either Windows or Mac, depending on your device and operating system, and follow the installation prompts.
b. The VPN will be on the top menu of your device. The icon looks like a globe.



b. Connect to the VPN using your GT login credentials.

2. Start the Database

a. Open the command line window and cd into your repository location.
b. cd into 'backend/thank-a-teacher'
c. Run the following command:
```
npm start
```
d. In a separate command line window (do not terminate the first one!) enter this command into a blank window (you do not need to cd into any directory):
```
ssh -N -L 3307:127.0.0.1:3306 thanktacc@thankta.cc.gatech.edu
```
e. When prompted for a password, enter: thankatapass
f. Do not close this window!

1. Start the React Application

a. In a third command window (do not close the first two), cd into your repository.
b. cd into 'ta-thanks'
c. Run the following command:
```
npm start
```
d. Open your web browser and navigate to http://localhost:3000

Troubleshooting

Missing Dependencies

a. Run `npm start` again to make sure that all dependencies are installed.
b. If a specific dependency is causing errors, download it directly by running:
`npm install package-name`
    a. Relevant dependencies:
        i. `npm install html2canvas`
            1. https://html2canvas.hertzen.com/

ii. `npm install axios`
    1. https://axios-http.com/docs/intro
iii. `npm install react-draggable`
    1. https://www.npmjs.com/package/react-draggable

TA Search Not Populating or Prompting JSON Errors

a. Make sure you are connected to the GT VPN client.
    a. The web browser VPN **will not** work! The database is hosted in Plesk, so access requires the client. Refer to the instructions on how to download the GT VPN client to your computer.
b. Ensure that you have three separate command line windows: one starting the backend with `npm start`, one starting the database using the `ssh` command, and one starting the React application.

Plesk Deployment

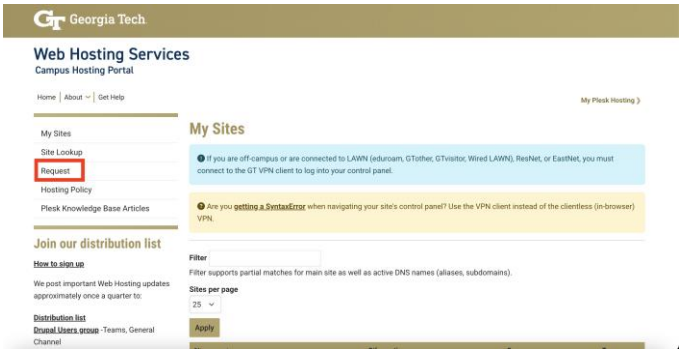
The following is a guide on how to set up this application on Plesk. Although the initial set-up will not need to be repeated, if issues arise with web deployment, following the steps can help pinpoint where the problem source is. Additionally, if a new Plesk site needs to be deployed for any reason, the information here will be helpful.

To simply access the Plesk site as a user, no set up is required. Please navigate to the following: https://thankta.cc.gatech.edu

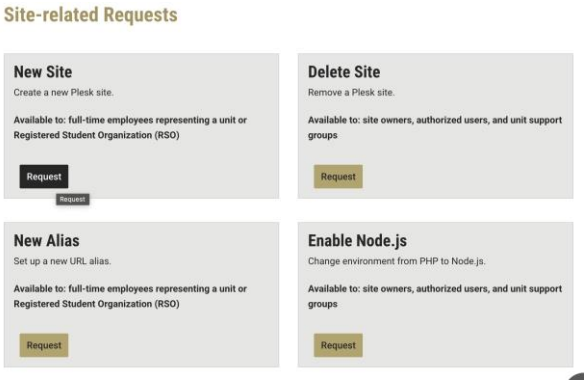
Prerequisites

1. Requesting a Plesk Site

a. Students cannot request Plesk sites. To request a site, you must ask a faculty member to take the following steps for you.
b. Navigate to the GT Web Hosting site: https://hosting.gatech.edu/about/plesk-hosting
c. Press the “Get Started" button
d. Select “Request” on the Campus Hosting Portal



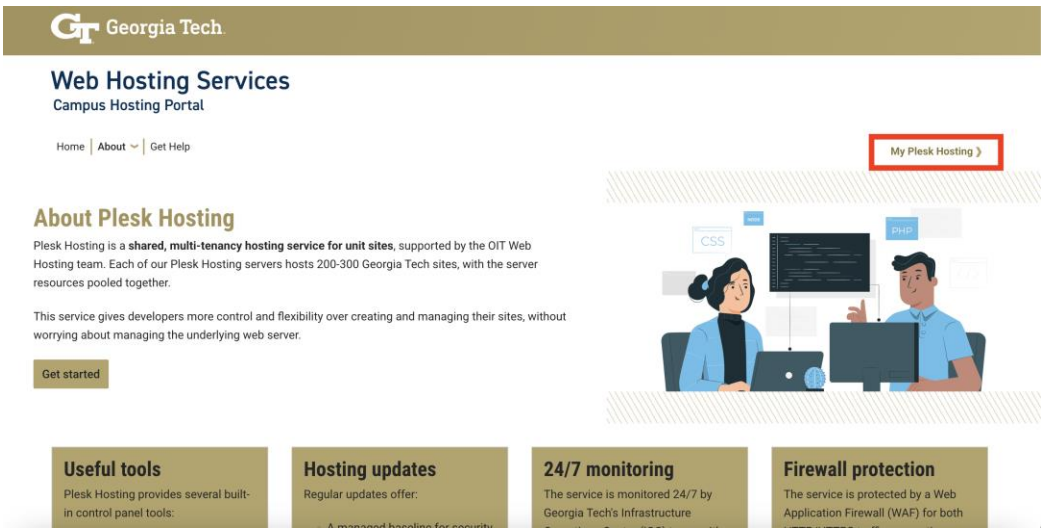
e. Scroll to Site Related Requests and press “Request” under new site. Fill out the request form. When doing so, please ensure Node.js is enabled.



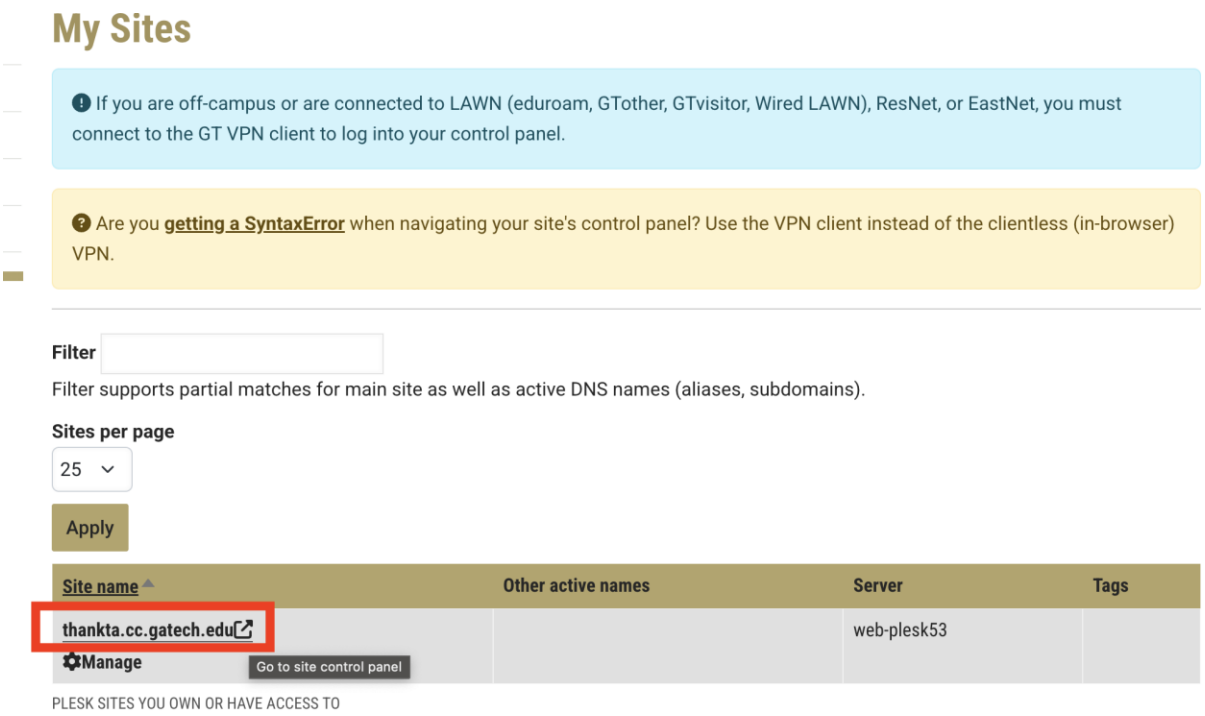
2. Accessing Plesk Site

a. Once your Plesk site has been created by GT OIT, you will be able to access it from the same GT Web Hosting Page: https://hosting.gatech.edu/about/plesk-hosting

b. Click “My Plesk Hosting” on the top right.



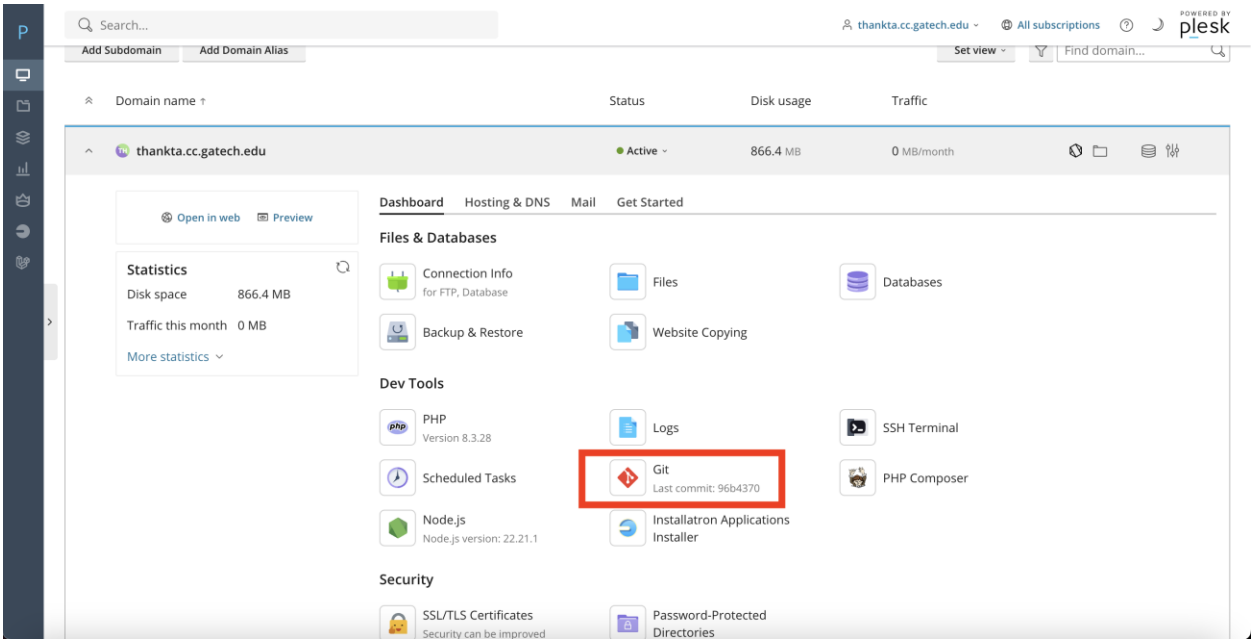
c. On the list of sites, click on thankta.cc.gatech.edu to go to the site control panel.
    a. Note: You MUST be on the GT VPN client for the site control panel to be accessible.



Configuring the Application

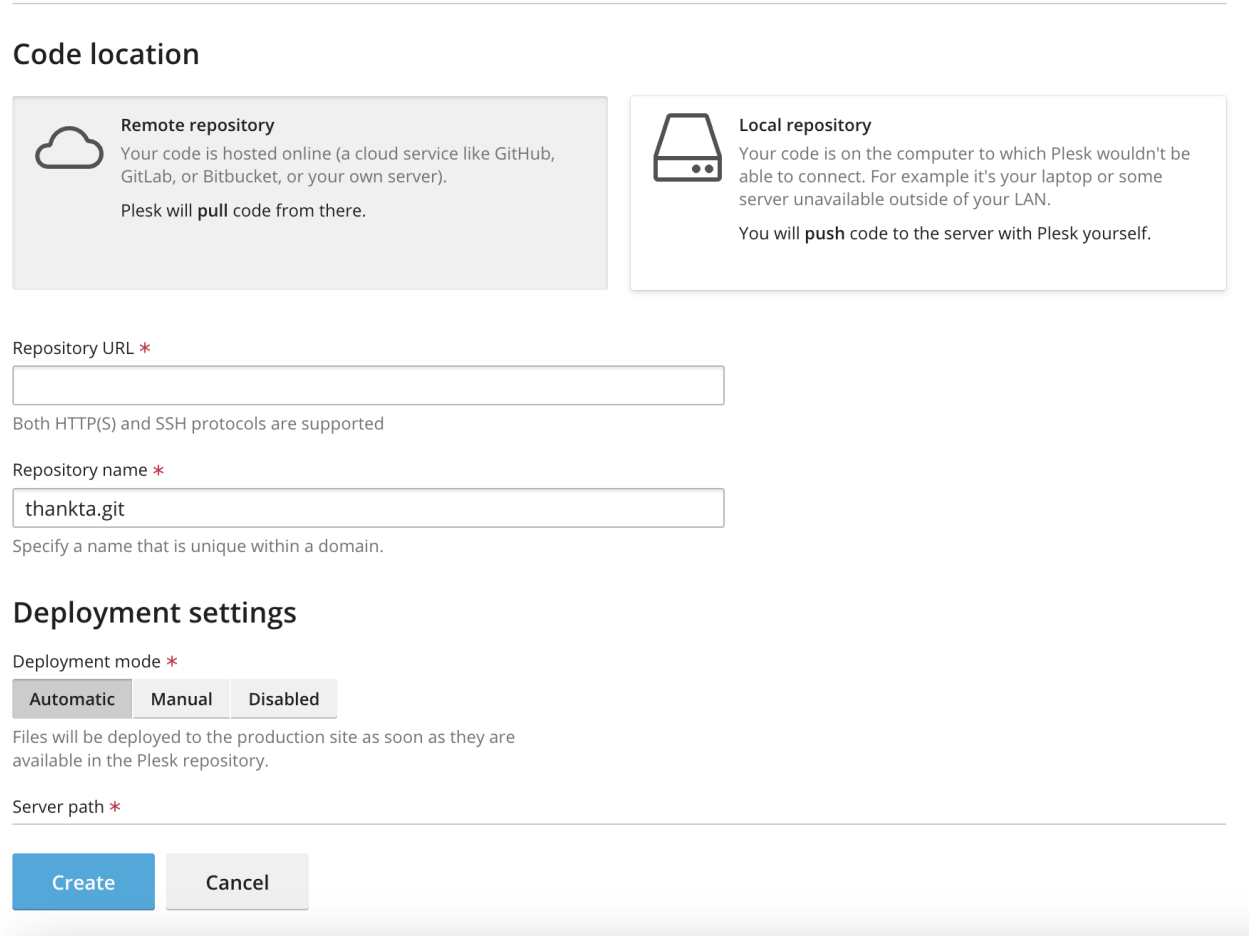
1. Connecting GitHub to Plesk

a. From the Site Control Panel, scroll to Dev Tools.



b. Select “Git”.

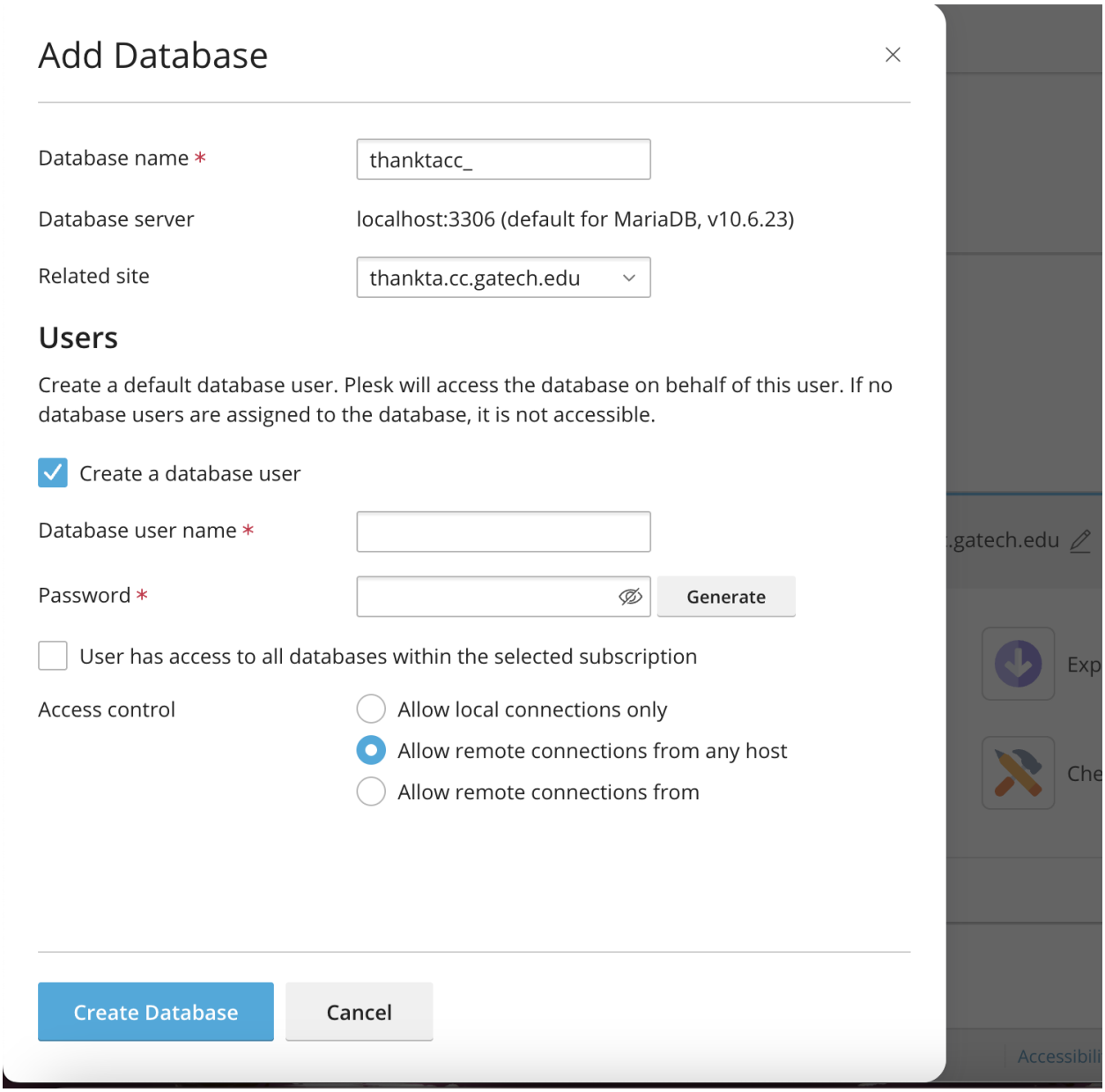
c. Select “Add a Repository”. You will see the following form:



d. Select “Local Repository” for Code Location (this is how you will connect it to a GitHub link).
e. Copy and paste the repository url of your GitHub repository.
f. For repository name, the name does not need to match the name on GitHub. The name simply needs to be descriptive and unique.
g. Select a Deployment Mode. Automatic means that commits to your repository will sync to Plesk automatically. If you do not want this, select Manual. You will have to manually pull all new commits to Plesk. Our team chose Automatic deployment for convenience.
h. For Server Path, use the following: /httpdocs/frontend/build
i. Then press “Create”.

2. Setting up Plesk Database

a. From the Site Control Panel, select “Databases”.
b. Select “Add Database”.
c. Fill out the following form:



d. For Database Name, choose something unique.
e. For related site, you can select thankta.cc.gatech.edu
f. Make sure Create Database User is selected, then create a username and password that you are able to remember. You must have a database user for Plesk to access the database.
g. For Access Control, select Allow remote connections from any host. This is necessary if you would like to be able to run the project locally as well as via Plesk.
h. Once the database is set up, you can edit it if needed by clicking on Databases from the Site Control Panel. Find your database in the list of databases. Under this

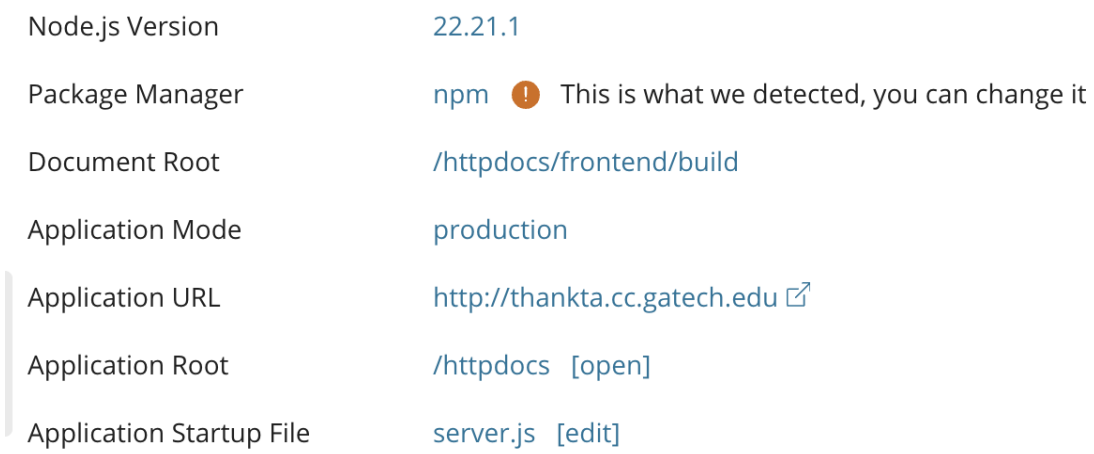
database, press phpMyAdmin. You will be redirected to the database page where you can access the tables.

3. Securing the Site

a. From the Site Control Panel, scroll to Security and select SSL/TLS Certificate.
b. Request a Free “Let’s Encrypt” certificate.

4. Adding SSO Functionality

a. First, make sure Node.js is enabled and properly configured. From the Site Control Panel, scroll to Dev Tools and select Node.js.
b. You will see the following screen:



c. Take note of the Application Root directory. It should be /httpdocs.
d. Refer to the following GT Knowledge Base Page on How to add SSO to a Node.js site: https://gatech.service-now.com/technology?id=kb_article_view&sysparm_article=KB0042364 . We will use the “easier method”.
e. Refer to the following GT Knowledge Base Page. Follow the Steps listed to add an Apache .htaccess file: https://gatech.service-now.com/home?id=kb_article_view&sysparm_article=KB0027183
    a. Create an .htaccess file in the root directory. In Plesk, navigate to the Application Root. In this folder, add a file called .htaccess.
    b. Add the folloiwng lines in the .htaccess file. No other lines are necessary:
    ```
    AuthType Cas
    Require valid-user
    ```
    c. Test that you are prompted to log in via SSO by navigating to thankta.cc.gatech.edu on an incognito browser.

Troubleshooting

SSO Not Prompting

a. Make sure you are not currently logged in using your GT credentials. This includes being on the VPN. In this case, there is no need to authenticate you, as you are already logged in via SSO from a different application.
b. Check the .htaccess file to make sure it is named correctly. There should be nothing in front of the .
c. Make sure the .htaccess file is in the application root. You can easily figure out what your application root is by navigating to the Node.js page in Plesk's Site Control Panel.

Application Not Displaying Properly

a. Check to make sure that the latest code from GitHub is synced to Plesk. If you do not have an automatic deployment set up, pull the latest changes.
b. Make sure Node.js is properly working. Sometimes dependencies need to be reinstalled. Navigate to Node.js from the Site Control Panel, press NPM Install, and then press Restart App. Refresh the site from your browser.