

# **Trip-Tracker User Manual**

## **1. Preface**

### **1.1 Introduction**

Trip-Tracker is an online website that provides user with practical information like weather forecast and bus routines, which helps users arrange their travels. The core feature of the website is route scheduling: once the user entered the departure and destination of their upcoming travel, the website would generate several travel plans of how to travel by public transportation and display it on the website.

Note that the performance of Trip-Tracker is highly influenced by internet connection as it's connected to some APIs located in China.

### **1.2 How to run the website**

Unfortunately, our budget for this project is precisely 0, so instead of running the website on a server, we have no choice but to let our clients run the development version of the website on their own computer's localhost. We've also considered the possibility of running the website on the LAN network of SCNUNET, but thinking of it would be necessary for us to keep our computers power on for days and necessary for our clients

to connect to SCNUNET to gain access of the website, we finally decided that clients would run the website on their own localhosts.

## 1.3 System Requirements

- Internet Connection

- Google Chrome browser or Microsoft Edge

## 2. Getting Started

### 2.1 Back-End

#### 2.1.1 Environment

To run the database on your machine, you need to install Python3 and PyCharm IDE. Details included in the following links.

[How to install Python3](#)

[How to install PyCharm](#)

#### 2.1.2 Dependencies

All the dependencies needed is listed out in requirements.txt.

**fastapi==0.104.1**

**requests==2.31.0**

**tortoise-orm==0.20.0**

**uvicorn==0.24.0.post1**

Use command “pip install -r requirements.txt” in the terminal to install all the dependencies.

### 2.2 Front-End

To make sure our website project based on Vue3+Vite framework runs well on your computer, you need to install some related dependencies, here's a list of what you have to prepare.

## (1) Node.js

Visit <https://nodejs.org/en>

Click “DOWNLOAD” at the top of the website

[ABOUT](#) | [LEARN](#) | [DOWNLOAD](#) | [DOCS](#) | [GET INVOLVED](#) | [CERTIFICATION](#) | [NEWS](#)


### Downloads


Latest LTS Version: 20.10.0 (includes npm 10.2.3)


Download the Node.js source code or a pre-built installer for your platform, and start developing today.

**LTS**  
Recommended For Most Users

**Current**  
Latest Features

  
**Windows Installer**  
node-v20.10.0-x64.msi

  
**macOS Installer**  
node-v20.10.0.pkg

  
**Source Code**  
node-v20.10.0.tar.gz

Windows Installer (.msi)  
Windows Binary (.zip)  
macOS Installer (.pkg)  
macOS Binary (.tar.gz)  
Linux Binaries (x64)  
Linux Binaries (ARM)  
Source Code

32-bit	64-bit	ARM64
32-bit	64-bit	ARM64
64-bit / ARM64		
64-bit		ARM64
64-bit		
ARMv7		ARMv8
node-v20.10.0.tar.gz		

Select the appropriate version for your computer and install Node.js. For Windows Installer, we highly recommend users download Windows Installer(.msi).

After installing node.js, users should open Windows command by pressing “win+r” and entering “cmd”.

Inside the command, enter “path”.

```
C:\Users\14573>path
PATH=C:\Program Files\Common Files\Oracle\Java\javapath;D:\python\Scripts\;D:\python\;C:\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;C:\Windows\System32\WindowsPowerShell\v1.0\;C:\Windows\System32\OpenSSH\;C:\Program Files (x86)\NVIDIA Corporation\PhysX\Common;C:\Program Files\NVIDIA Corporation\NVIDIA NvDLISR;C:\Program Files\dotnet\;C:\Program Files\Bandizip\;C:\Program Files (x86)\dotnet\;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\WindowsPowerShell\v1.0\;C:\WINDOWS\System32\OpenSSH\F:\Git\cmd\F:\Nodejs\;C:\Program Files\Microsoft SQL Server\150\Tools\Binn\;C:\Program Files\Microsoft SQL Server\Client SDK\ODBC\170\Tools\Binn\F:\MatLab\bin;C:\Users\14573\AppData\Local\Microsoft\WindowsApps;C:\Users\14573\AppData\Local\atom\bin;C:\Users\14573\AppData\Roaming\npm;F:\Microsoft VS Code\bin;C:\Users\14573\.dotnet\tools;F:\msys2\mingw64\bin;F:\IntelliJ IDEA Community Edition 2023.2.4\bin;
```

Verify if “Node.js” is included in your path, if not, the installation might have not succeeded.

Again, in the Windows command, enter “node --version”, which should outputs the version of your Node.js installed.

## (2) npm

In new versions of Node.js, npm is built-in and should be also installed at the same time you installed Node.js. But it's better to double check that if you have successfully installed npm on your computer.

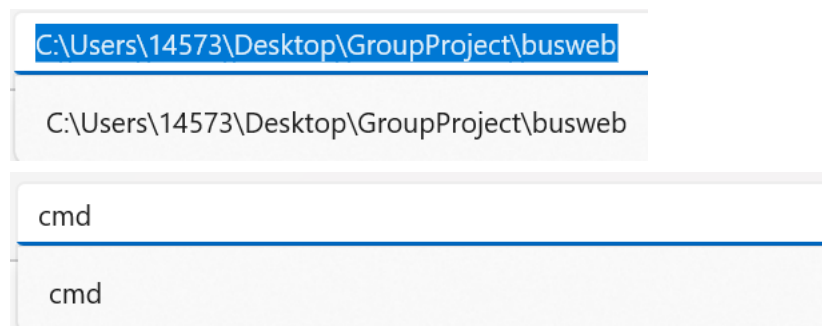
Open the Windows command by the same way we mentioned in (1) Node.js. Enter “npm -v”, if you have successfully installed npm on your computer, the Windows command should print out the version of npm installed on your computer.

```
C:\Users\14573>npm -v
9.5.0
```

## (3) npm packages

Unzip Trip-Tracked.zip and go into the “busweb” folder,

open Windows command in that folder.



And enter “npm install” inside the Windows command, npm shall automatically install all the dependencies required for this project.

[Tutorial for macOS](#)

## **WE ARE NOW FULLY PREPARED TO START THE TRIPTRACKER WEB APP.**

### **3. Booting The System**

#### **3.1 Back-End**

Open the back-end folder in PyCharm and run main.py.

You should see these messages in the terminal if you have successfully startup the database on your localhost.

```
INFO:      Started server process [29028]
INFO:      Waiting for application startup.
INFO:      Application startup complete.
INFO:      Uvicorn running on http://127.0.0.1:8000 (Press CTRL+C to quit)
```

#### **3.2 Front-End**

Before running the website on your localhost, **make sure**

you have started the database on your localhost following the instructions in 3.1, otherwise the website would not function!

Go into the “busweb” folder, open Windows command in that folder as we mentioned in 2.2(3). Enter “npm run dev”, and the website should now be available on localhost.

```
C:\Users\14573\Desktop\GroupProject\busweb>npm run dev

> busweb@0.0.0 dev
> vite

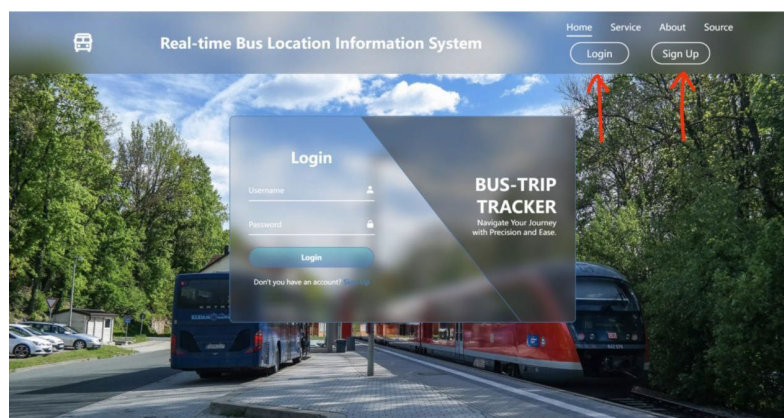
VITE v4.4.11 ready in 540 ms

→ Local:   http://localhost:5173/
→ Network: use --host to expose
→ press h to show help
```

Click the localhost link while pressing the Ctrl button, and the Trip-Tracker web app shall now be available on your browser.

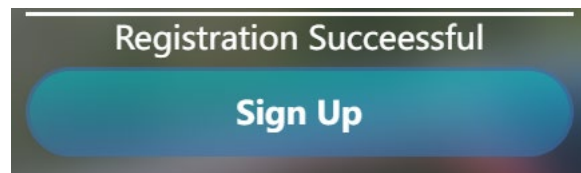
## 4. How to use Trip-Tracker

### 4.1 Login and Register

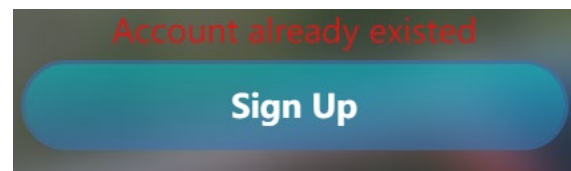


#### 4.1.1 Register for a new account

On the upper right corner of the website, there is a *Sign Up* button for new visitors. Fill in the form and you shall see the message “Registration Successful”.

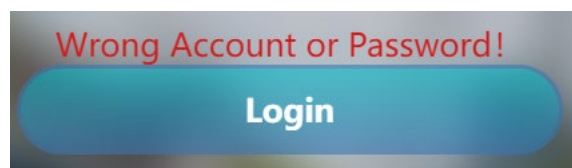


If the username is occupied, the registration would fail, with a message of “Account already existed” in red.



#### **4.1.2 Signing into your account**

Next to the *Sign Up* button, there is a *Login* button, click the button and enter your account and password, the system would verify if they matches, if not, it comes up with a notice of “Wrong Account or Password”.



#### **4.2 Bus Route Checkup and Navigation page**

After logging in to the website, you're directed to the Bus Route Checkup and Navigation page.

FROM  
Starting Station

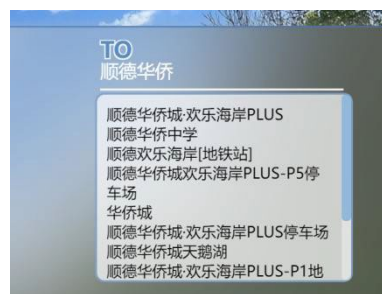
TO  
Destination Station

Search

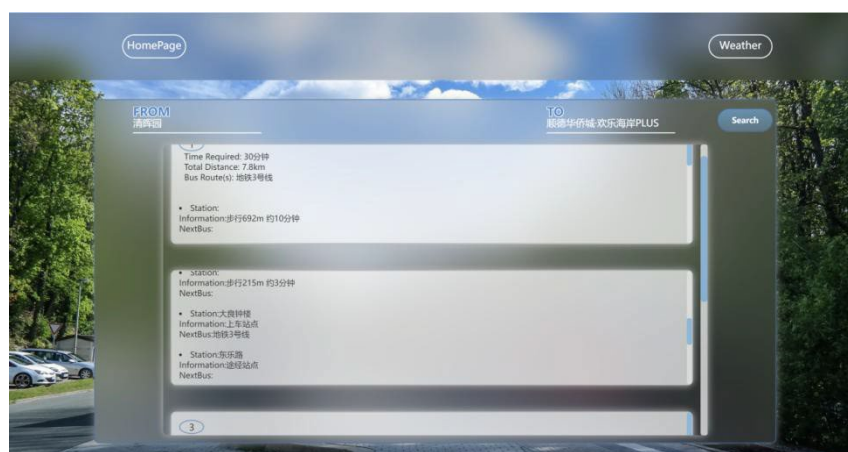
To generate bus routes, you have to first fill in the two input boxes *FROM*(Starting Station) and then *TO*(Destination Station).

For each input box, you have to enter some keywords in Chinese and then click anywhere outside the input box to make the mouse lose focus of the input box, available options would appear below the input box then. Select a station by simply clicking on it, and the options would disappear.

*If you have trouble in typing in Chinese, see [APPENDIX](#) for some Chinese keywords with English translation besides.*



After you have filled in the two input boxes, you can now click the *Search* button on the right to search for matching bus routes.



You can the big scroll bar on the right to view different plans and scroll bar is also available inside each plan to view the details like



total time, distance and instructions of the respective bus route.

If you want to log out, click the *HomePage* button on the upper left corner.

### 4.3 Weather Information page



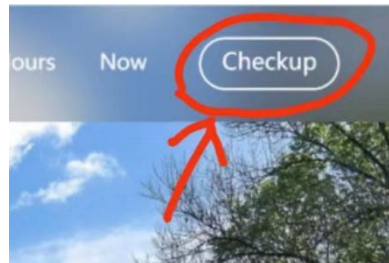
To check current weather information of Foshan, click the *Weather* button in the upper right corner of the website which navigates you to the Weather Forecast page.



At the top of the website, there are three links, including *Three Days*, *Hours* and *Now*. Click the *Three Days* button to check Foshan's local weather forecast of the upcoming three days, *Hours* for weather forecast of the future six hours, *Now* for current weather

information

To return to the *Bus Route Checkup and Navigation* page, click the *Checkup* button in the upper right corner of the webpage.



## 5. Checklist

**Q:** The Login and Register page is not functioning with no response at all

**A:** Please check if main.py of the back-end folder is running or if it's throwing errors

**Q:** There is nothing except blank in my browser

**A:** Please check if you have accidentally shut down the terminal for busweb and if the website is running on your localhost.

**Q:** The Bus Route and Navigation page and the Weather Forecast page is not functioning.

**A:** It might be bad network connection or API failure, if you're sure that your net connection is well, please contact us and we share fix the connection between the website and related APIs.

## 6. APPENDIX

Keywords in Chinese with English translation

华南师范	South China Normal University
北京	Beijing
上海	Shanghai
广州	Guangzhou
深圳	Shenzhen
顺德	Shunde
佛山	Foshan