CS 407 Fall 2024 | Team 4 Dev Environment Documentation
Course Clash

Team Members

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Project Requirements

Hardware specifications

- 4 Core CPU at 2.4 GHz or faster
- Recommended minimum 8GB RAM.
- 2GB minimum of storage

Software dependencies

- Windows 10/11, Ubuntu 20.04/22.04, or MacOS (new enough for NodeJS)
  - UNIX-based system recommended, but not required
- NodeJS version 20.17.0 (LTS)
  - NPM version 10.8.2
    - Specific NPM dependencies can be installed through *$npm -i* via the *package.json* files located in the *frontend* and *backend* source directories
  - For running JavaScript backend and frontend
- Git version 2.45.2 or newer
  - For cloning the repository
- Database connection is on the cloud through AWS (No installation necessary)

Tools and IDEs

- A browser such as Google Chrome, Firefox, or Safari
- Visual Studio Code (newest version)
  - Recommended Extensions (not required):
    - ESLint
    - HTML CSS Support
- Nodemon - Used to automatically restart node.js backend when a file is changed, rather than manually terminating, and restarting each time.

Configuration Settings

- Backend Environment File
  - Make a file called *.env* in the "backend" folder

- The contents of the *.env* file for the backend are given at the end this document (copy these contents **exactly** into the *.env* file)
- This file contains API keys, host information, and email specifications.
- AWS Global Bundle
  - In the "backend" folder, you will need to place the AWS *global-bundle.pem* file
  - The global bundle file can be found here: global-bundle.pem

Setup Steps

Step 1: Install Node.js
This exact process depends on your operating system. Specific instructions can be found on the Node.JS website: https://nodejs.org/en/download/package-manager

Step 2: Clone the repository
Execute the following command in your terminal:
$ git clone https://github.com/tcarsello/cs407-fall2024

This will create a directory called *cs047-fall2024*

Step 3: Get AWS SSL certificates
Download the *global-bundle.pem* from the link provided above, and place it at
cs407-fall2024/backend/global-bundle.pem

Step 4: Create .env files
Copy the .env files for the backend and frontend from the end of this document, and place them at *cs407-fall2024/backend/.env* and *cs407-fall2024/frontend/.env* respectively.

Step 5: *Install NPM packages*
Change directory into *cs407-fall2024/backend* and execute:
$ npm -i

Similarly, change directory into *cs407-fall2024/frontend* and execute:
$ npm -i

Step 6: Start backend
Start the backend by changing directory to *cs407-fall2024/backend* and executing:
$ npm start

OR by running node js directory with:
$ node server.js

OR with nodemon, by executing
$nodemon .

Step 7: Start frontend
Start the frontend by changing directory to *cs407-fall2024/backend* and executing:

$ npm start

OR by running

$ npm run start

Backend Environment File
cs407-fall2024/backend/.env

```
DEV_MODE=true
API_PORT=4000

DB_HOST='course-clash-dev.c3smw08e68so.us-east-1.rds.amazonaws.com'
DB_PORT=5432
DB_USERNAME='postgres'
DB_PASSWORD='cs407-db-pass'
DB_NAME='postgres'
DB_SSL_CERT_PATH='./global-bundle.pem'

JWT_SECRET='cs407-jwt-secret'

AWS_ACCESS_KEY_ID='AKIA5NE7L4LMNRMSHCGX'
AWS_SECRET_ACCESS_KEY='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'
AWS_S3_REGION='us-east-1'
AWS_S3_BUCKET_NAME='cs407-courseclash-dev'

EMAIL="courseclashnet@gmail.com"
PASSWORD_APP_EMAIL="pvaa rmkp hyuz ingo"
```

This frontend .env may or may not be necessary depending on your version of Node.JS. It resolves a CORS issue that causes the frontend to crash upon startup. This issue will not exist in a production environment. It is due to the fact that the React development server is hosted at a different location than the backend API that this is sometimes necessary. In a production environment, the react code is bundled and does not have a server process behind it.

Frontend Environment File (DEV Purposes, not for PROD)
cs407-fall2024/frontend/.env

```
DANGEROUSLY_DISABLE_HOST_CHECK=true
```