

Module 5 Lab 1

Brandon Trinkle

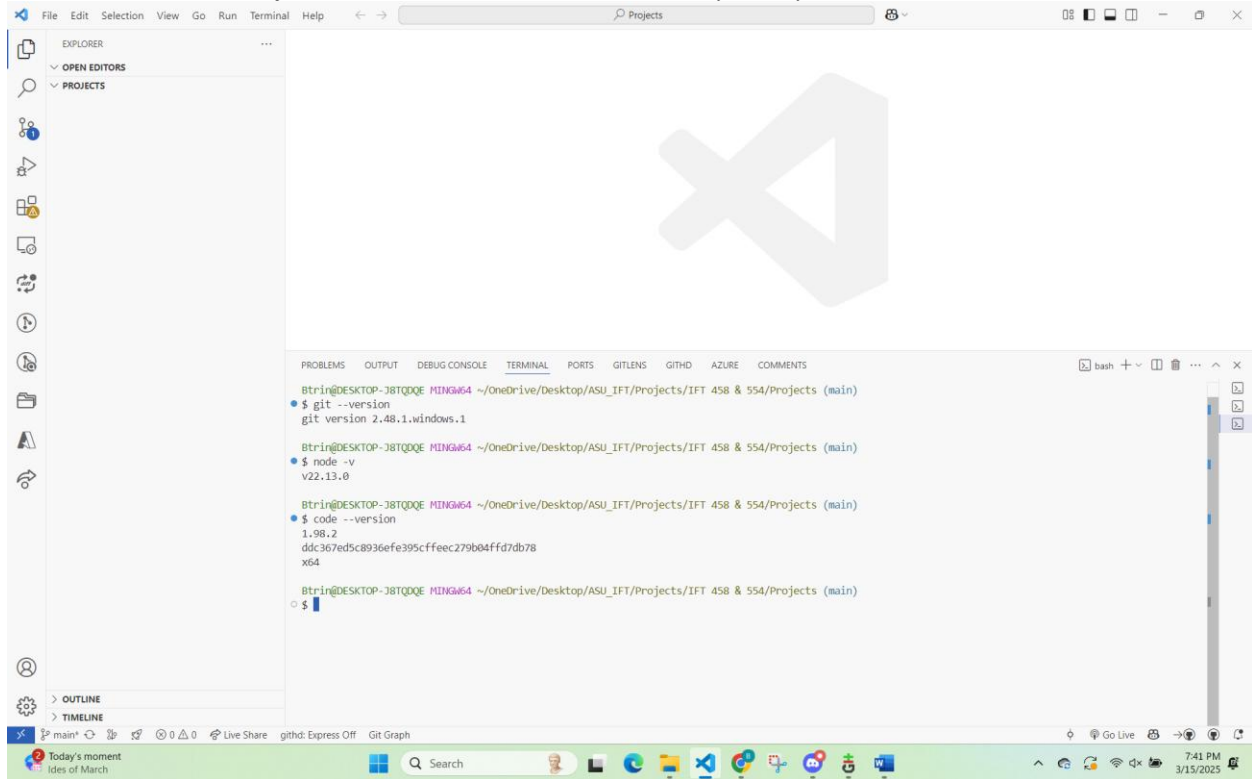
IFT 458: Middleware Prog & Database Sec

Professor: Dinesh Sthapit

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Module 5 Lab 1

1. Screenshots of the installed Git and VSCode on your system.



The screenshot displays the Visual Studio Code (VS Code) application window. The interface includes a sidebar on the left with icons for Explorer, Search, Source Control, Run and Debug, and Extensions. The main editor area shows a large, faint VS Code logo. At the bottom, the TERMINAL panel is active, displaying the following commands and their outputs:

```
Btrln@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ git --version
git version 2.48.1.windows.1

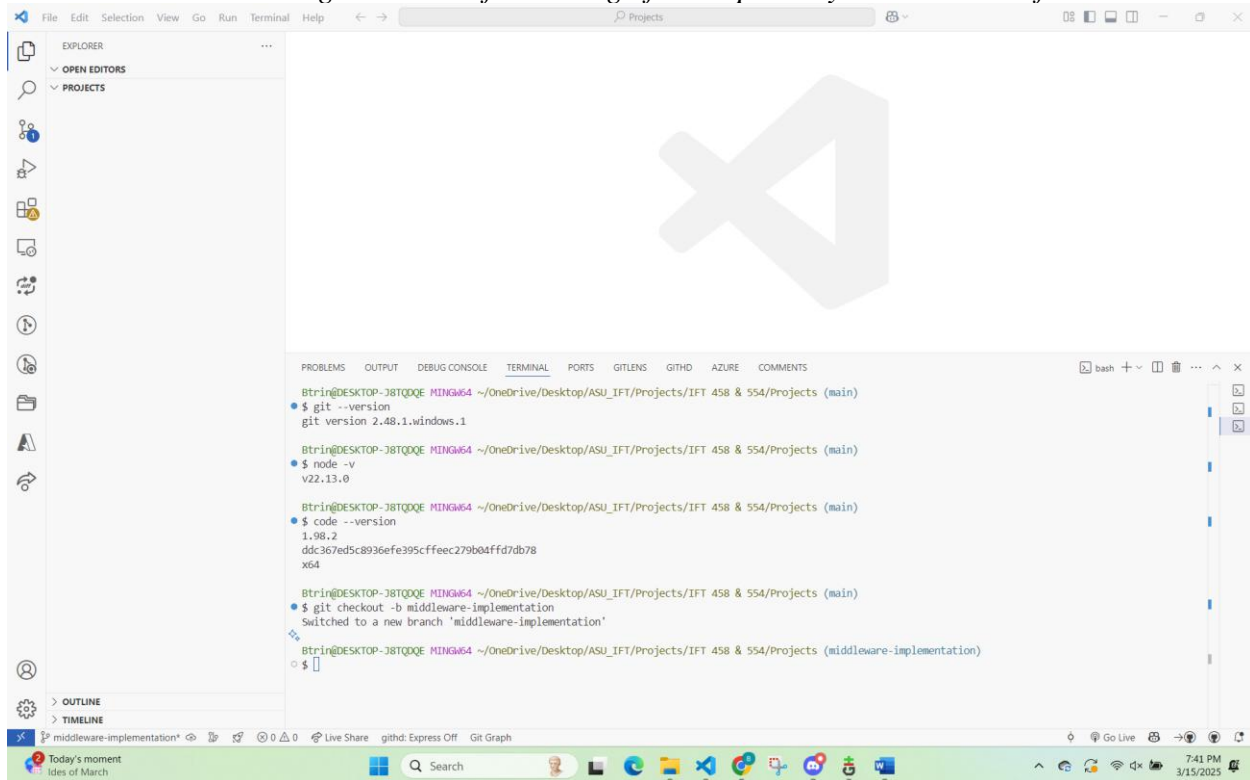
Btrln@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ node -v
v22.13.0

Btrln@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ code --version
1.98.2
ddc367ed5c8936efe395cffeec279b84ffd7db78
x64

Btrln@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$
```

The Windows taskbar at the bottom shows the Start button, a search bar, and several pinned application icons. The system tray on the right indicates the time as 7:41 PM on 3/15/2025.

2. Terminal showing the successful cloning of the repository and creation of a new branch.



The screenshot shows the VS Code interface with a terminal window open. The terminal displays the following commands and output:

```

Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ git --version
git version 2.48.1.windows.1

Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ node -v
v22.13.0

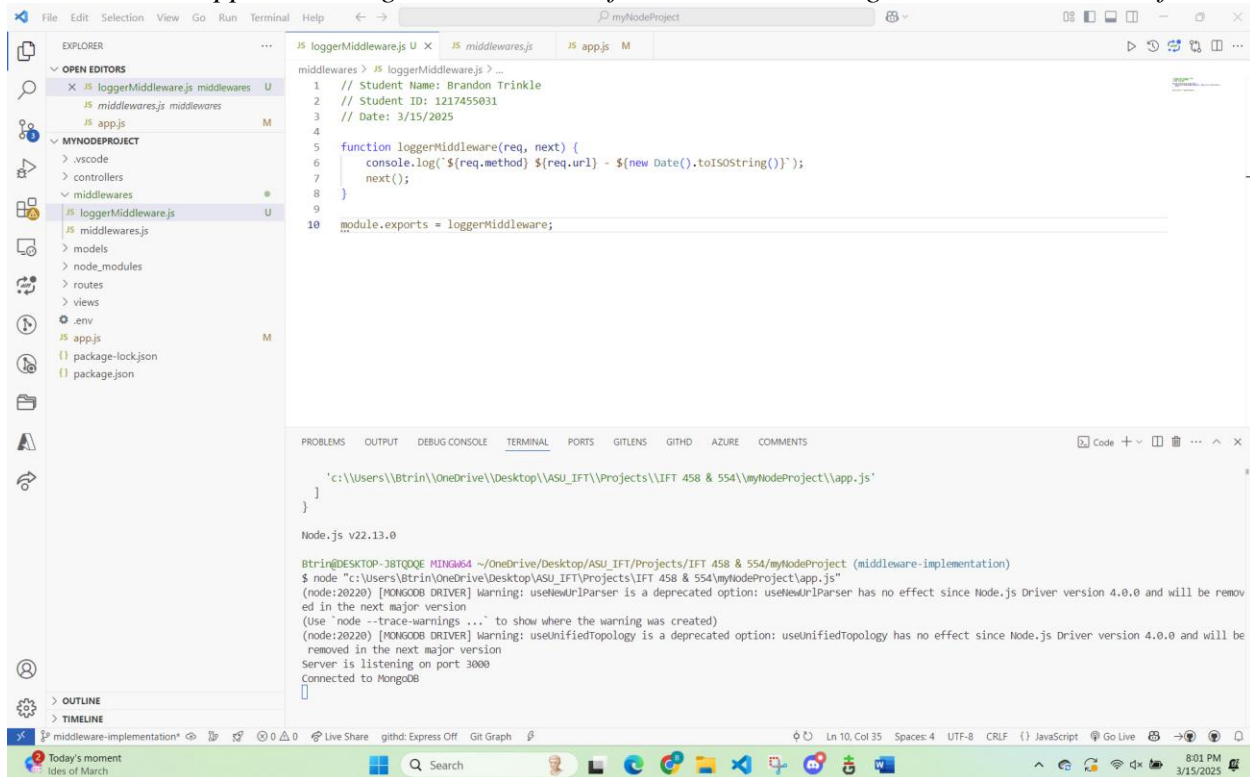
Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ code --version
1.98.2
ddc367ed5c8936efe395cffeec279b04ffd7db78
x64

Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (main)
$ git checkout -b middleware-implementation
Switched to a new branch 'middleware-implementation'

Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/Projects (middleware-implementation)
$ 

```

3. Code snippets showing the middleware function and its integration into the server file.



The screenshot shows the VS Code interface with two files open: `loggerMiddleware.js` and `app.js`. The `loggerMiddleware.js` file contains the following code:

```

1 // Student Name: Brandon Trinkle
2 // Student ID: 1217455031
3 // Date: 3/15/2025
4
5 function loggerMiddleware(req, next) {
6   console.log(`${req.method} ${req.url} - ${new Date().toISOString()}`);
7   next();
8 }
9
10 module.exports = loggerMiddleware;

```

The `app.js` file contains the following code:

```

1 const express = require('express');
2 const loggerMiddleware = require('./loggerMiddleware');
3
4 const app = express();
5
6 app.use(loggerMiddleware);
7
8 // ... (other code)
9
10 app.listen(3000, () => {
11   console.log('Server is listening on port 3000');
12 });

```

The terminal window shows the output of running the application:

```

Btr@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$ node "c:\Users\Btr\OneDrive\Desktop\ASU_IFT\Projects\IFT 458 & 554\myNodeProject\app.js"
(node:20220) [MONGODB DRIVER] Warning: useNewUrlParser is a deprecated option: useNewUrlParser has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
(node:20220) [MONGODB DRIVER] Warning: useUnifiedTopology is a deprecated option: useUnifiedTopology has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
Server is listening on port 3000
Connected to MongoDB

```

The screenshot shows the VS Code interface with the Explorer panel on the left displaying the file structure of a project named 'myNodeProject'. The Explorer shows folders like 'controllers', 'middlewares', 'models', 'routes', 'views', and files like 'app.js', 'package-lock.json', and 'package.json'. The 'app.js' file is selected and its content is displayed in the editor. The code in 'app.js' includes imports for 'express', 'body-parser', 'makeUpperCase', 'studentsRouter', and 'loggerMiddleware', followed by their initialization and use in the Express application. The routes section defines a GET endpoint for '/students' that calls 'studentsRouter'. The loggerMiddleware is also defined and used. The terminal at the bottom shows the output of a 'git push' command, indicating a successful push to the 'origin' branch. The output includes the commit hash, the branch name, and the URL of the pull request on GitHub.

```

1 // Student Name: Brandon Trinkle
2 // Student ID: 1217455031
3 // Date: 3/15/2025
4
5 const express = require('express');
6 const bodyParser = require('body-parser'); // 487.4k (gzipped: 212.1k)
7 const { makeUpperCase } = require('./middlewares/middlewares.js');
8 const studentsRouter = require('./controllers/students.js');
9 const loggerMiddleware = require('./middlewares/loggerMiddleware');
10
11 const app = express();
12
13 // Middlewares
14 app.use(bodyParser.json());
15 app.use(makeUpperCase);
16 app.use(loggerMiddleware);
17
18 // Routes
19 app.use('/students', studentsRouter);
20 app.use('/', function(req, res, next) {
21   console.log('Request URL:', req.url);
22   res.send('Hello!');
23 });

```

```

Btrink@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$ node "c:\Users\Btrink\OneDrive\Desktop\ASU_IFT\Projects\IFT 458 & 554\myNodeProject\app.js"
(node:20220) [MONGODB DRIVER] Warning: useNewUrlParser is a deprecated option: useNewUrlParser has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
(node:20220) [MONGODB DRIVER] Warning: useUnifiedTopology is a deprecated option: useUnifiedTopology has no effect since Node.js Driver version 4.0.0 and will be removed in the next major version
Server is listening on port 3000
Connected to MongoDB

```

```

Btrink@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$ git push origin middleware-implementation
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'middleware-implementation' on GitHub by visiting:
remote:   https://github.com/brandontrinkle/Projects/pull/new/middleware-implementation
remote:
remote: To https://github.com/brandontrinkle/Projects.git
remote:   * [new branch]      middleware-implementation -> middleware-implementation
Btrink@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$

```

4. Source control panel in VSCode showing staged changes and the commit message.

The screenshot shows the VS Code interface with the Explorer panel on the left displaying the file structure of a project named 'myNodeProject'. The Explorer shows folders like 'controllers', 'middlewares', 'models', 'routes', 'views', and files like 'app.js', 'package-lock.json', and 'package.json'. The 'loggerMiddleware.js' file is selected and its content is displayed in the editor. The code in 'loggerMiddleware.js' defines a 'loggerMiddleware' function that logs the request method and URL, and then calls 'next()'. The function is exported as 'loggerMiddleware'. The terminal at the bottom shows the output of a 'git push' command, indicating a successful push to the 'origin' branch. The output includes the commit hash, the branch name, and the URL of the pull request on GitHub.

```

1 // Student Name: Brandon Trinkle
2 // Student ID: 1217455031
3 // Date: 3/15/2025
4
5 function loggerMiddleware(req, next) {
6   console.log(`${req.method} ${req.url} - ${new Date().toISOString()}`);
7   next();
8 }
9
10 module.exports = loggerMiddleware;

```

```

Btrink@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$ git push origin middleware-implementation
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'middleware-implementation' on GitHub by visiting:
remote:   https://github.com/brandontrinkle/Projects/pull/new/middleware-implementation
remote:
remote: To https://github.com/brandontrinkle/Projects.git
remote:   * [new branch]      middleware-implementation -> middleware-implementation
Btrink@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT 458 & 554/myNodeProject (middleware-implementation)
$

```

5. Terminal showing the successful git push command.

The screenshot shows the VS Code interface with a project named 'myNodeProject'. The Explorer sidebar on the left shows the file structure, including 'middlewares.js' and 'app.js'. The main editor displays the content of 'middlewares.js', which contains a simple logging middleware function. The function logs the request method, URL, and date, then calls 'next()'. The bottom panel shows the terminal with the output of a 'git push' command, indicating that a new branch 'middleware-implementation' has been created and pushed to GitHub. The status bar at the bottom shows the current file is 'middlewares.js' and the project is 'myNodeProject'.

```

middlewares.js
1 // Student Name: Brandon Trinkle
2 // Student ID: 1217455031
3 // Date: 3/15/2023
4
5 function loggerMiddleware(req, next) {
6   console.log(`${req.method} ${req.url} - ${new Date().toISOString()}`);
7   next();
8 }
9
10 module.exports = loggerMiddleware;

```

```

BTrinkle@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT_458 & 554/myNodeProject (middleware-implementation)
$ git push origin middleware-implementation
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Create a pull request for 'middleware-implementation' on GitHub by visiting:
remote:   https://github.com/brandonTrinkle/Projects/pull/new/middleware-implementation
remote: To https://github.com/brandonTrinkle/Projects.git
 * [new branch]      middleware-implementation -> middleware-implementation
BTrinkle@DESKTOP-38TQDQE MINGW64 ~/OneDrive/Desktop/ASU_IFT/Projects/IFT_458 & 554/myNodeProject (middleware-implementation)
$

```

6. GitHub webpage showing the opened pull request.

