

[CS200]-Software Tools And Technologies Lab 2

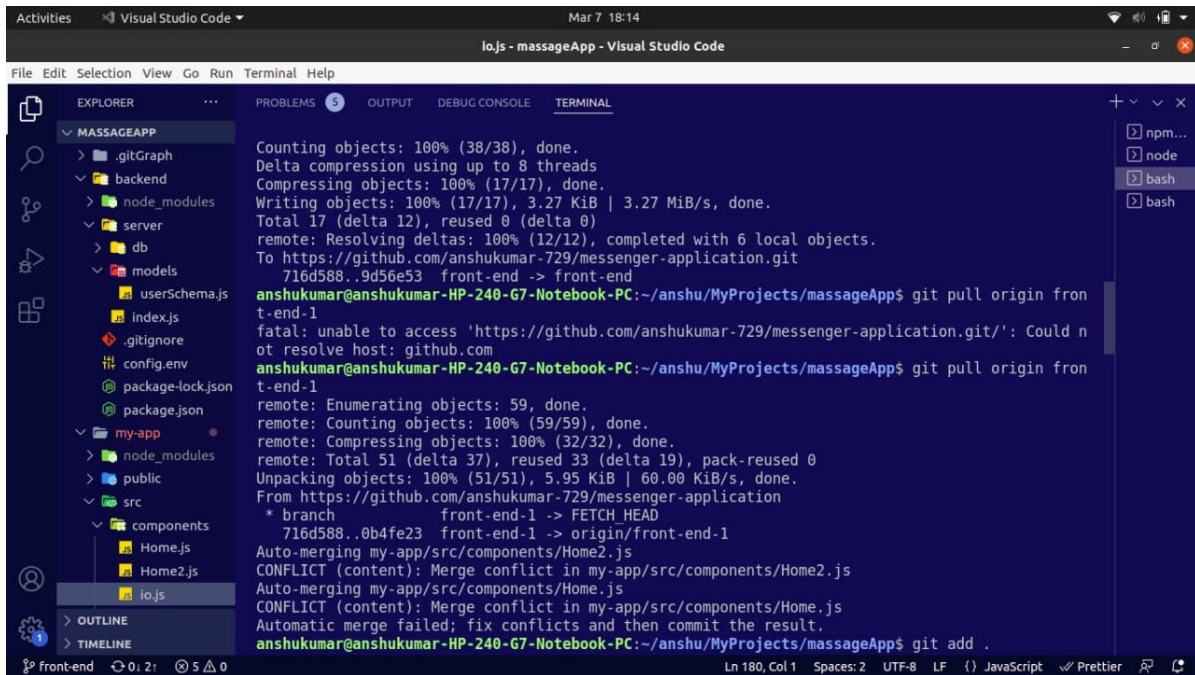
Git Project

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Name: Aniket Mohanty Roll No:12040200

1.1 Pulling the Front-end



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the output of a `git pull` command, which successfully pulls updates from the remote repository. The output includes details about object counting, compression, and the resolution of merge conflicts in the `my-app/src/components/Home2.js` and `Home.js` files. The terminal also shows the execution of `git add` to stage the changes.

```
Counting objects: 100% (38/38), done.
Delta compression using up to 8 threads
Compressing objects: 100% (17/17), done.
Writing objects: 100% (17/17), 3.27 KiB | 3.27 MiB/s, done.
Total 17 (delta 12), reused 0 (delta 0)
remote: Resolving deltas: 100% (12/12), completed with 6 local objects.
To https://github.com/anshukumar-729/messenger-application.git
  716d588..9d56e53  front-end -> front-end
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git pull origin front-end-1
fatal: unable to access 'https://github.com/anshukumar-729/messenger-application.git/': Could not resolve host: github.com
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git pull origin front-end-1
remote: Enumerating objects: 59, done.
remote: Counting objects: 100% (59/59), done.
remote: Compressing objects: 100% (32/32), done.
remote: Total 51 (delta 37), reused 33 (delta 19), pack-reused 0
Unpacking objects: 100% (51/51), 5.95 KiB | 60.00 KiB/s, done.
From https://github.com/anshukumar-729/messenger-application
* branch      front-end-1 -> FETCH_HEAD
  716d588..0b4fe23  front-end-1 -> origin/front-end-1
Auto-merging my-app/src/components/Home2.js
CONFLICT (content): Merge conflict in my-app/src/components/Home2.js
Auto-merging my-app/src/components/Home.js
CONFLICT (content): Merge conflict in my-app/src/components/Home.js
Automatic merge failed; fix conflicts and then commit the result.
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git add
```

1.2 Difference in Back-end Branches

The screenshot shows the Visual Studio Code interface with the Explorer view on the left displaying the project structure. The main editor shows a git diff output for the file `index.js` in the `backend/server` directory. The diff compares the current branch with a previous commit (18c5b4d5ee5). The changes include adding a new function `getList` and updating the `register` endpoint to use `async` and `await` for database operations.

```
[3]+ Stopped git relog
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git diff 18c5b4d5ee5
739b412014158d77af51facc9eebc b85ed44604008c71ddb33ff5c4b12eafdb2c3eb
diff --git a/backend/server/index.js b/backend/server/index.js
index 33a17cc..d9333f5 100644
--- a/backend/server/index.js
+++ b/backend/server/index.js
@@ -34,14 +34,17 @@ const getList = async (req,res) => {
   res.json({ status: 'error' })
 }
+
+ var d = new Date();
+ var n = d.toLocaleTimeString();
+ app.post('/api/register', async (req, res) => {
+
+   try {
+     const user = await List2.create({
+       name: req.body.name,
+       message: req.body.message,
+       message: req.body.message,
+       time:n
+     })
+     result = await List2
+   } catch (error) {
+     console.log(error)
+   }
+ })
diff --git a/backend/server/models/userSchema.js b/backend/server/models/userSchema.js
```

1.3 Merging Back-end

The screenshot shows the Visual Studio Code interface with the Explorer view on the left displaying the project structure. The main editor shows the output of several git commands executed in the terminal. The commands include adding the current directory to git, committing the changes with the message "feature of removing input after a successful sent of message is added", pushing the changes to the remote repository, checking out the 'front-end' branch, and merging the 'back-end' branch into the 'front-end' branch. The output shows the successful completion of these operations, including the creation of a new commit and the merging of the branches.

```
To https://github.com/anshukumar-729/messenger-application.git
716d588..45aa7f1 back-end -> back-end
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git add .
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git commit -m "featu
re of removing input after a successful sent of message is added"
[back-end ed2a1a7] feature of removing input after a successful sent of message is added
1 file changed, 2 insertions(+)
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git push
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 537 bytes | 537.00 KiB/s, done.
Total 6 (delta 5), reused 0 (delta 0)
remote: Resolving deltas: 100% (5/5), completed with 5 local objects.
To https://github.com/anshukumar-729/messenger-application.git
45aa7f1..ed2a1a7 back-end -> back-end
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git checkout front-e
nd
Switched to branch 'front-end'
Your branch is up to date with 'origin/front-end'.
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$ git merge back-end
Updating 2595dbe..ed2a1a7
Fast-forward
 backend/server/index.js | 6 +++++
 my-app/src/components/io.js | 2 ++
 2 files changed, 5 insertions(+), 3 deletions(-)
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/massageApp$
```

1.4 Back-end Conflicts

Visual Studio Code interface showing a conflict in the file `Home.js` within the `my-app > src > components > Home.js` path. The conflict is between the current change (HEAD) and an incoming change (0b4fe2304dc9dabcef19f97f4611c12044e5e921). The code shows imports for `React` and `react-router-dom` with conflict markers.

```

1 import React from "react";
2 <----- HEAD (Current Change)
3 import { NavLink, Link } from "react-router-dom";
4 =====
5 >>>>>> 0b4fe2304dc9dabcef19f97f4611c12044e5e921 (Incoming Change)
6 import { useState } from "react";
7 import { useEffect } from "react";
8
9 const Home = () => {
10   const [name, setName] = useState("");
11   const [message, setMessage] = useState("");
12   const [n1, setn1] = useState("");
13   const [n2, setn2] = useState("");
14   const [n3, setn3] = useState("");
15   const [n4, setn4] = useState("");
16   const [n5, setn5] = useState("");

```

1.5 Merging Front-end

Visual Studio Code interface showing the terminal output of a `git checkout develop` and `git merge front-end` command. The merge is a fast-forward merge of 16 files with 1181 insertions and 15 deletions. The Explorer shows the project structure with `Home2.js` selected.

```

anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git checkout develop
Switched to branch 'development'
Your branch is up to date with 'origin/development'.
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git merge front-end
Updating 716d588..7f2d016
Fast-forward
 .gitGraph/2022_03_03_11_58_40_git_graph.dot | 212 +++++
 .gitGraph/2022_03_03_11_58_40_git_graph.dot.pdf | Bin 0 -> 23097 bytes
 backend/server/index.js | 9 +-
 backend/server/models/userSchema.js | 6 +-
 my-app/package-lock.json | 59 +++++
 my-app/package.json | 1 +
 my-app/src/App.js | 4 +-
 my-app/src/components/Home.js | 3 +-
 my-app/src/components/Home2.js | 19 +-
 my-app/src/components/SendButton.svg | 4 +
 my-app/src/components/io.js | 231 +++++
 my-app/src/components/messee.js | 506 +++++
 my-app/src/components/navBar.js | 31 +++
 my-app/src/components/style.css | 38 +++
 my-app/src/components/style2.css | 28 +++
 my-app/src/index.css | 45 +++
 16 files changed, 1181 insertions(+), 15 deletions(-)
 create mode 100644 .gitGraph/2022_03_03_11_58_40_git_graph.dot
 create mode 100644 .gitGraph/2022_03_03_11_58_40_git_graph.dot.pdf
 create mode 100644 my-app/src/components/SendButton.svg
 create mode 100644 my-app/src/components/io.js

```

1.6 Front-end Conflicts

```

2 <===== HEAD (Current Change)
3 import NavBar from "./navBar";
4 import IO from "./io";
5 import Messegas from "./messege";
6
7 const Home2=()=>{
8   return (
9     <div>
10       <NavBar />
11       <Messegas />
12       <br />
13     </div>
14   );
15 }
16
17 =====
18 import Io from "./io"
19
20 const Home2 = () => {
21   return (
22     <div>
23       <h1> hello </h1>
24       <Io />
25     </div>
26   )
  
```

1.7 Difference in Front-end branches

```

anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git diff 9d56e536f198b43ae06f8aa6c512d34f
715c96ff a2968fb22ea8d80488c66d1cb133325bea5d8bc4
diff --git a/my-app/src/components/Home2.js b/my-app/src/components/Home2.js
index f747a28..9f1b5a2 100644
--- a/my-app/src/components/Home2.js
+++ b/my-app/src/components/Home2.js
@@ -7,10 +7,12 @@ const Home2=()=>{
   return (
     <div>
       <NavBar />
+      <IO/>
+      <Messegas />
+      <br />
     </div>
   );
 }
+
+export default Home2;
\ No newline at end of file
diff --git a/my-app/src/components/SendButton.svg b/my-app/src/components/SendButton.svg
new file mode 100644
index 0000000..70d99e3
--- /dev/null
+++ b/my-app/src/components/SendButton.svg
@@ -0,0 +1,4 @@
+<svg width="133" height="133" viewBox="0 0 133 133" fill="none" xmlns="http://www.w3.org/2000/svg">
  
```


1.8 Merging Different Front Branches

```

anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git merge front-end
Updating 716d588..2595dbe
Fast-forward
 .gitGraph/2022_03_03_11_58_40_git_graph.dot      | 212 ++++++
 .gitGraph/2022_03_03_11_58_40_git_graph.dot.pdf | Bin 0 -> 23097 bytes
 backend/server/index.js                         | 7 +-
 backend/server/models/userSchema.js             | 6 +-
 my-app/package-lock.json                       | 59 +++++
 my-app/package.json                            | 1 +
 my-app/src/App.js                              | 4 +-
 my-app/src/components/Home.js                   | 3 +-
 my-app/src/components/Home2.js                  | 18 +-
 my-app/src/components/SendButton.svg            | 4 +
 my-app/src/components/io.js                     | 199 ++++++
 my-app/src/components/messege.js                 | 506 ++++++
 my-app/src/components/navBar.js                  | 31 +++
 my-app/src/components/style.css                  | 37 +++
 my-app/src/components/style2.css                 | 19 ++
 my-app/src/index.css                            | 31 +++
 16 files changed, 1123 insertions(+), 14 deletions(-)
 create mode 100644 .gitGraph/2022_03_03_11_58_40_git_graph.dot
 create mode 100644 .gitGraph/2022_03_03_11_58_40_git_graph.dot.pdf
 create mode 100644 my-app/src/components/SendButton.svg
 create mode 100644 my-app/src/components/io.js
 create mode 100644 my-app/src/components/messege.js
 create mode 100644 my-app/src/components/navBar.js
 create mode 100644 my-app/src/components/style.css
 create mode 100644 my-app/src/components/style2.css

```

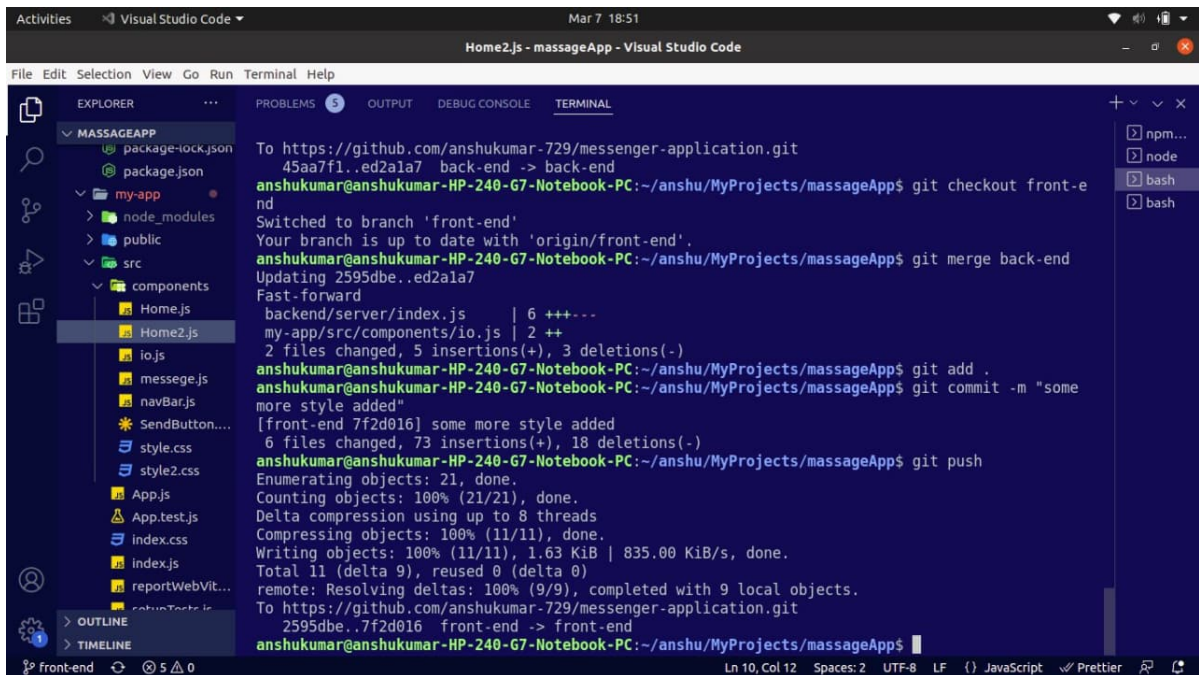
1.9 Combining the Whole Project

```

anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git merge develop
Updating 22fa67f..7f2d016
Fast-forward
 backend/server/index.js                         | 9 +-
 backend/server/models/userSchema.js             | 6 +-
 my-app/package-lock.json                       | 52610 ++++++
 my-app/package.json                            | 1 +
 my-app/src/App.js                              | 4 +-
 my-app/src/components/Home.js                   | 3 +-
 my-app/src/components/Home2.js                  | 19 +-
 my-app/src/components/SendButton.svg            | 4 +
 my-app/src/components/io.js                     | 231 +
 my-app/src/components/messege.js                 | 506 +
 my-app/src/components/nav.js                     | 0
 my-app/src/components/navBar.js                  | 31 +
 my-app/src/components/style.css                  | 38 +
 my-app/src/components/style2.css                 | 28 +
 my-app/src/index.css                            | 45 +
 15 files changed, 37770 insertions(+), 15765 deletions(-)
 create mode 100644 my-app/src/components/SendButton.svg
 delete mode 100644 my-app/src/components/nav.js
 create mode 100644 my-app/src/components/navBar.js
 create mode 100644 my-app/src/components/style.css

```

1.10 Pushing The Final Project To Github



```
Activities Visual Studio Code Mar 7 18:51
Home2.js - messageApp - Visual Studio Code

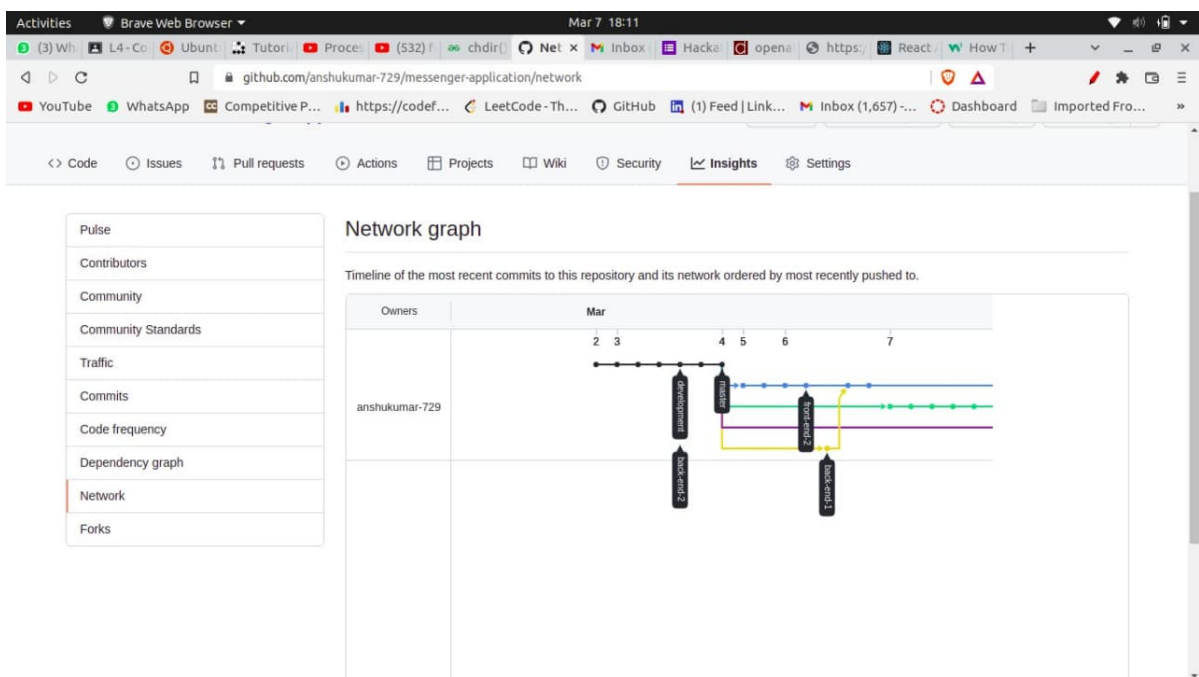
File Edit Selection View Go Run Terminal Help

EXPLORER
  MESSAGEAPP
    package-lock.json
    package.json
    my-app
      node_modules
      public
      src
      components
        Home.js
        Home2.js
        io.js
        messege.js
        navBar.js
        SendButton...
        style.css
        style2.css
    App.js
    App.test.js
    index.css
    index.js
    reportWebVit...
    setupTests.js

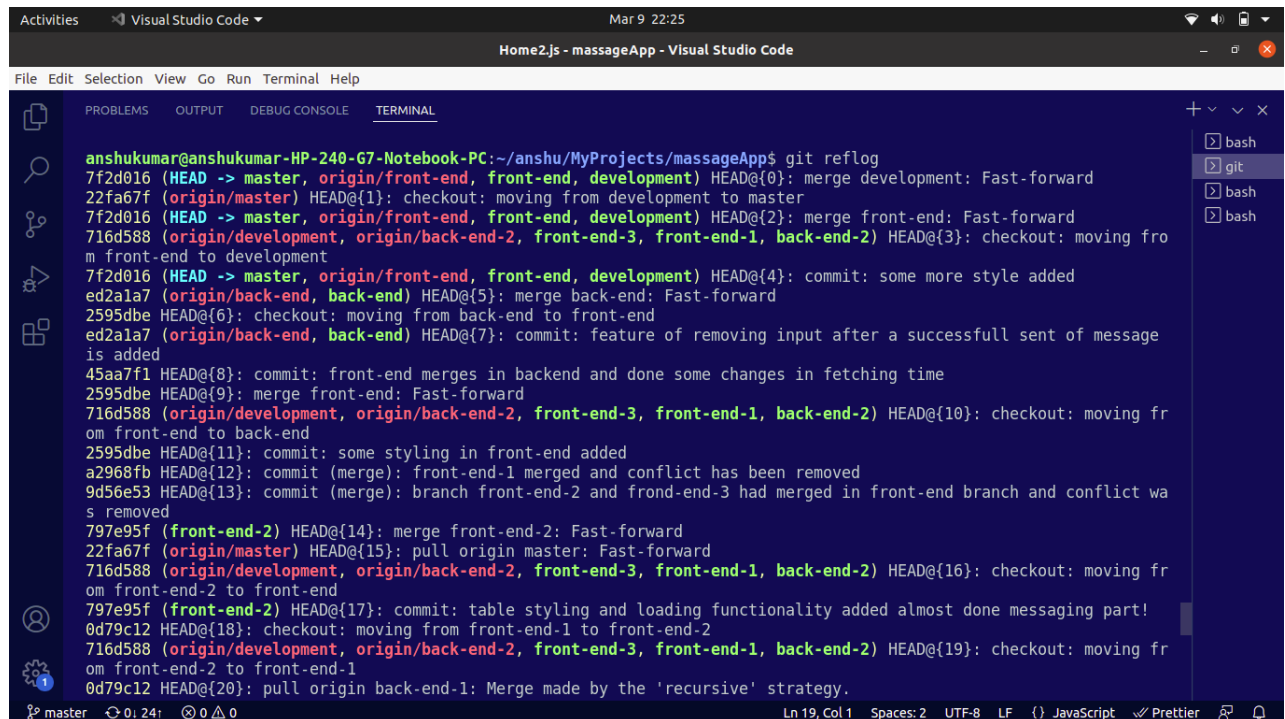
OUTLINE
  front-end
  5 0

TERMINAL
  To https://github.com/anshukumar-729/messenger-application.git
  45aa7f1..ed2a1a7 back-end -> back-end
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git checkout front-e
  nd
  Switched to branch 'front-end'
  Your branch is up to date with 'origin/front-end'.
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git merge back-end
  Updating 2595dbe..ed2a1a7
  Fast-forward
  backend/server/index.js | 6 +++---
  my-app/src/components/io.js | 2 ++
  2 files changed, 5 insertions(+), 3 deletions(-)
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git add .
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git commit -m "some
  more style added"
  [front-end 7f2d016] some more style added
  6 files changed, 73 insertions(+), 18 deletions(-)
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git push
  Enumerating objects: 21, done.
  Counting objects: 100% (21/21), done.
  Delta compression using up to 8 threads
  Compressing objects: 100% (11/11), done.
  Writing objects: 100% (11/11), 1.63 KiB | 835.00 KiB/s, done.
  Total 11 (delta 9), reused 0 (delta 0)
  remote: Resolving deltas: 100% (9/9), completed with 9 local objects.
  To https://github.com/anshukumar-729/messenger-application.git
  2595dbe..7f2d016 front-end -> front-end
  anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$
```

1.11 Graph Formed From github



1.12 Reflog



Activities Visual Studio Code Mar 9 22:25 Home2Js - messageApp - Visual Studio Code

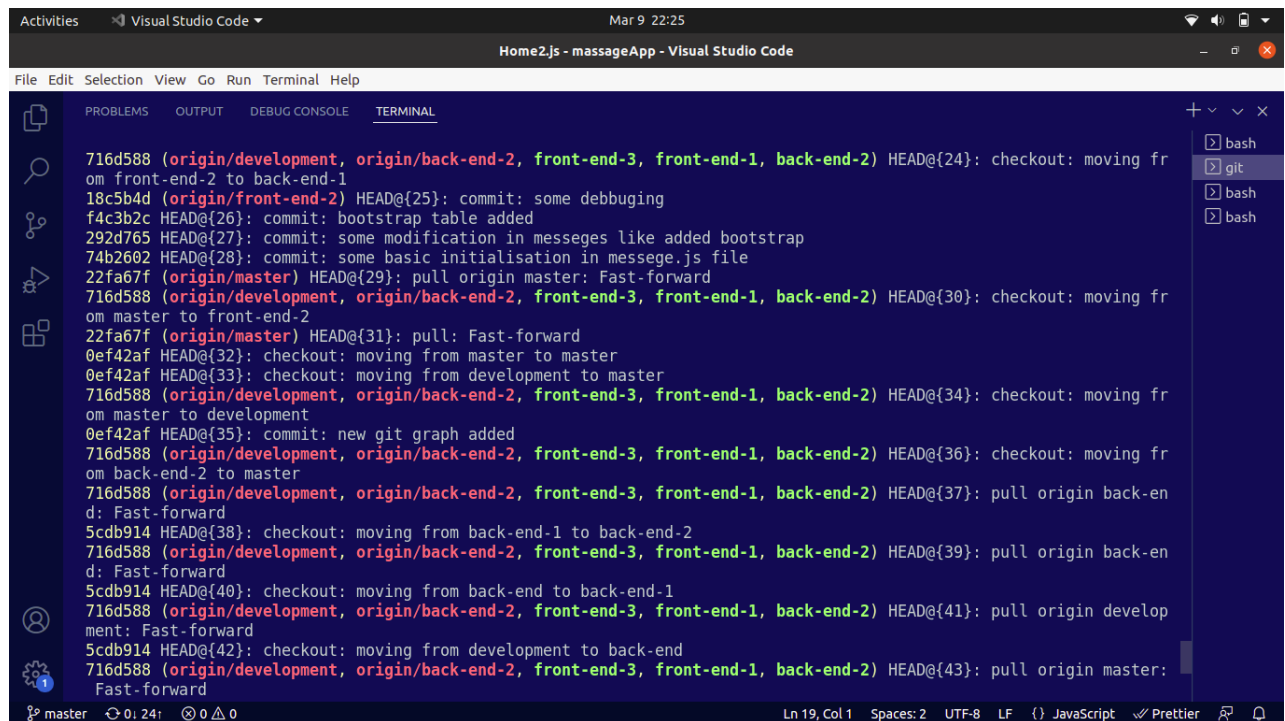
File Edit Selection View Go Run Terminal Help

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
anshukumar@anshukumar-HP-240-G7-Notebook-PC:~/anshu/MyProjects/messageApp$ git reflog
7f2d016 (HEAD -> master, origin/front-end, front-end, development) HEAD@{0}: merge development: Fast-forward
22fa67f (origin/master) HEAD@{1}: checkout: moving from development to master
7f2d016 (HEAD -> master, origin/front-end, front-end, development) HEAD@{2}: merge front-end: Fast-forward
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{3}: checkout: moving from front-end to development
7f2d016 (HEAD -> master, origin/front-end, front-end, development) HEAD@{4}: commit: some more style added
ed2a1a7 (origin/back-end, back-end) HEAD@{5}: merge back-end: Fast-forward
2595dbe HEAD@{6}: checkout: moving from back-end to front-end
ed2a1a7 (origin/back-end, back-end) HEAD@{7}: commit: feature of removing input after a successful sent of message is added
45aa7f1 HEAD@{8}: commit: front-end merges in backend and done some changes in fetching time
2595dbe HEAD@{9}: merge front-end: Fast-forward
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{10}: checkout: moving from front-end to back-end
2595dbe HEAD@{11}: commit: some styling in front-end added
a2968fb HEAD@{12}: commit (merge): front-end-1 merged and conflict has been removed
9d56e53 HEAD@{13}: commit (merge): branch front-end-2 and front-end-3 had merged in front-end branch and conflict was removed
797e95f (front-end-2) HEAD@{14}: merge front-end-2: Fast-forward
22fa67f (origin/master) HEAD@{15}: pull origin master: Fast-forward
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{16}: checkout: moving from front-end-2 to front-end
797e95f (front-end-2) HEAD@{17}: commit: table styling and loading functionality added almost done messaging part!
0d79c12 HEAD@{18}: checkout: moving from front-end-1 to front-end-2
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{19}: checkout: moving from front-end-2 to front-end-1
0d79c12 HEAD@{20}: pull origin back-end-1: Merge made by the 'recursive' strategy.
```

master 0: 24: 0 0 0

Ln 19, Col 1 Spaces: 2 UTF-8 LF {} JavaScript Prettier



Activities Visual Studio Code Mar 9 22:25 Home2Js - messageApp - Visual Studio Code

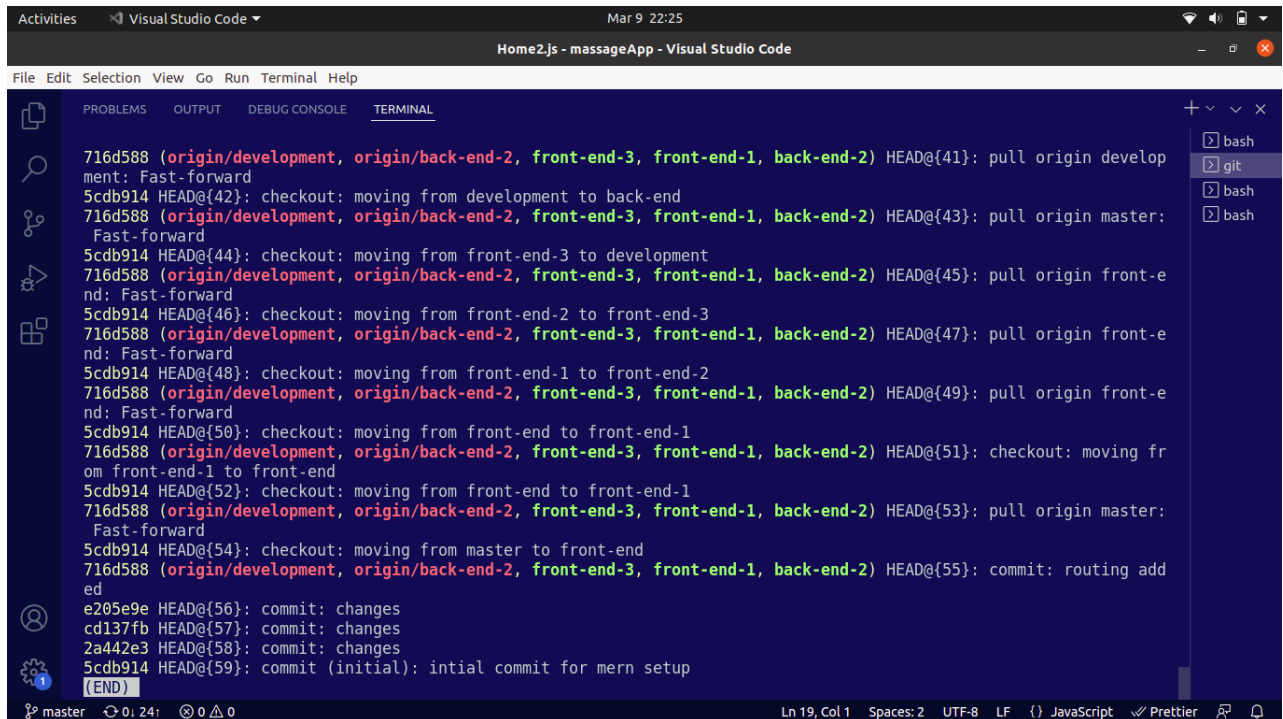
File Edit Selection View Go Run Terminal Help

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{24}: checkout: moving from front-end-2 to back-end-1
18c5b4d (origin/front-end-2) HEAD@{25}: commit: some debugging
f4c3b2c HEAD@{26}: commit: bootstrap table added
292d765 HEAD@{27}: commit: some modification in messages like added bootstrap
74b2602 HEAD@{28}: commit: some basic initialisation in messege.js file
22fa67f (origin/master) HEAD@{29}: pull origin master: Fast-forward
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{30}: checkout: moving from master to front-end-2
22fa67f (origin/master) HEAD@{31}: pull: Fast-forward
0ef42af HEAD@{32}: checkout: moving from master to master
0ef42af HEAD@{33}: checkout: moving from development to master
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{34}: checkout: moving from master to development
0ef42af HEAD@{35}: commit: new git graph added
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{36}: checkout: moving from back-end-2 to master
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{37}: pull origin back-end: Fast-forward
5cdb914 HEAD@{38}: checkout: moving from back-end-1 to back-end-2
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{39}: pull origin back-end: Fast-forward
5cdb914 HEAD@{40}: checkout: moving from back-end to back-end-1
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{41}: pull origin development: Fast-forward
5cdb914 HEAD@{42}: checkout: moving from development to back-end
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{43}: pull origin master: Fast-forward
```

master 0: 24: 0 0 0

Ln 19, Col 1 Spaces: 2 UTF-8 LF {} JavaScript Prettier



```
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{41}: pull origin develop
ment: Fast-forward
5cdb914 HEAD@{42}: checkout: moving from development to back-end
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{43}: pull origin master:
Fast-forward
5cdb914 HEAD@{44}: checkout: moving from front-end-3 to development
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{45}: pull origin front-e
nd: Fast-forward
5cdb914 HEAD@{46}: checkout: moving from front-end-2 to front-end-3
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{47}: pull origin front-e
nd: Fast-forward
5cdb914 HEAD@{48}: checkout: moving from front-end-1 to front-end-2
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{49}: pull origin front-e
nd: Fast-forward
5cdb914 HEAD@{50}: checkout: moving from front-end to front-end-1
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{51}: checkout: moving fr
om front-end-1 to front-end
5cdb914 HEAD@{52}: checkout: moving from front-end to front-end-1
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{53}: pull origin master:
Fast-forward
5cdb914 HEAD@{54}: checkout: moving from master to front-end
716d588 (origin/development, origin/back-end-2, front-end-3, front-end-1, back-end-2) HEAD@{55}: commit: routing add
ed
e205e9e HEAD@{56}: commit: changes
cd137fb HEAD@{57}: commit: changes
2a442e3 HEAD@{58}: commit: changes
5cdb914 HEAD@{59}: commit (initial): intial commit for mern setup
(END)
```

The git relog command returns a brief description of all the commits done by anyone to the repository.

The relog isn't part of the repo itself (it's stored separately to the commits themselves) and isn't included in pushes, fetches or clones; it's purely local.

The link for the Repository is as follows:-

<https://github.com/anshukumar-729/messenger-application.git>