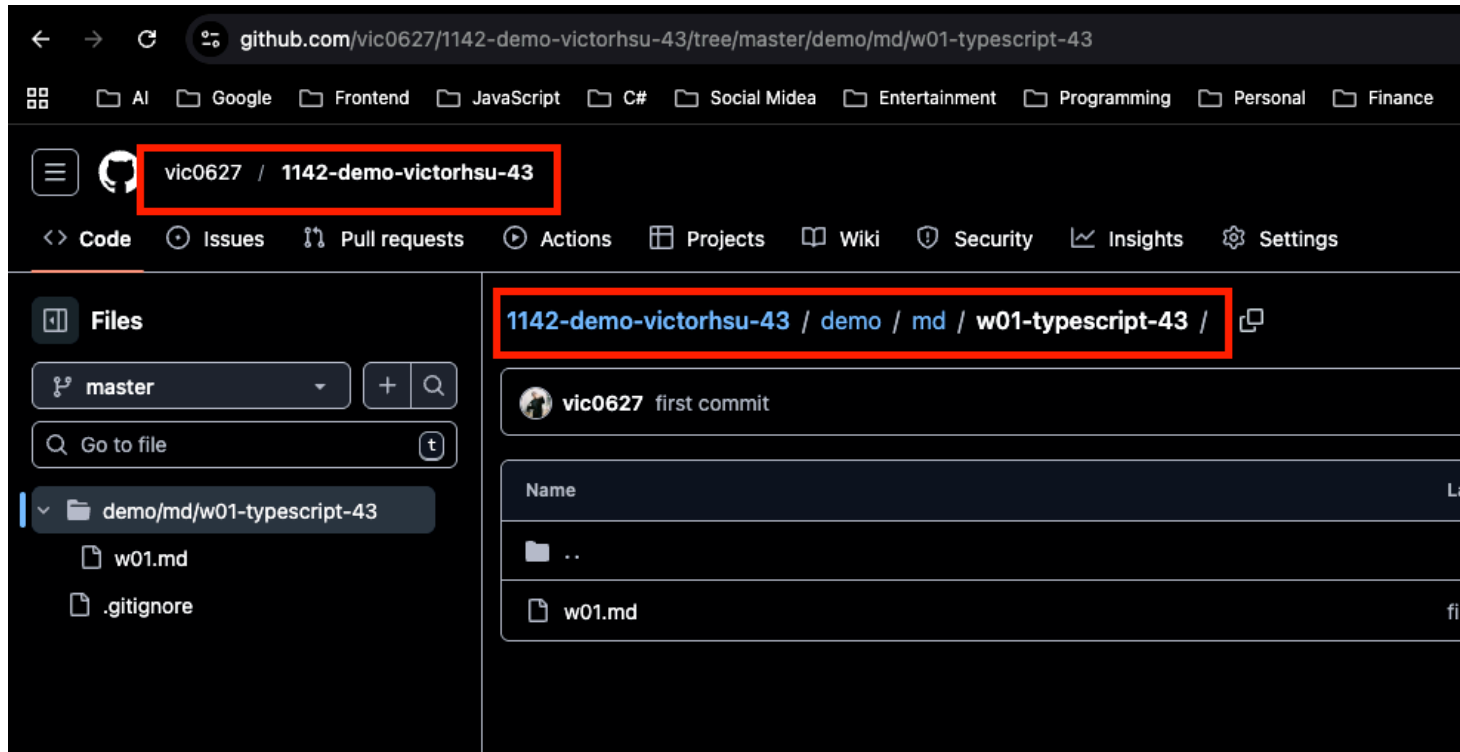


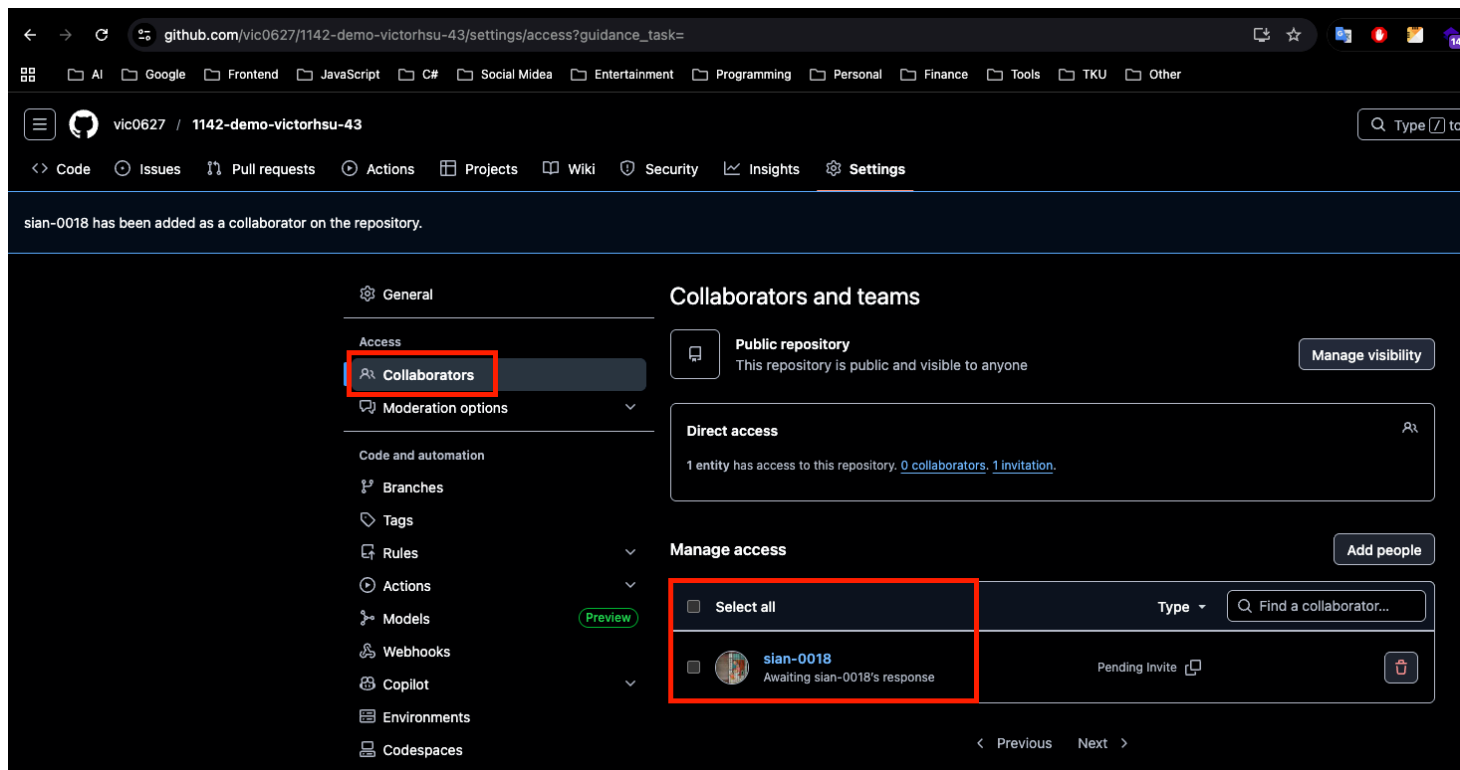
Github URL

W01-P1: Setup Github

=> Github demo URL



=> share to the teacher and TA



W01-P2: TypeScript tutorials (1)

=> Type Annotation and Union Type

The image shows a development environment with VS Code on the left and a web browser on the right.

VS Code Editor:

- EXPLORER:** The file tree shows a project structure with a `tutorials` folder containing `t1.ts`.
- EDITOR:** The `t1.ts` file is open, showing TypeScript code with various annotations and union types. Red boxes highlight specific lines: `console.log('t1.ts is running');`, `console.log(awesomeName, amount, isAwesome);`, and `requestStatus = 'random';`. A pink box highlights `requestStatus = 'error';`.
- TERMINAL:** The terminal shows the command `node -w01-typescript-43` and the output `VITE v7.3.1 ready in 131 ms`.

Web Browser (localhost:5173):

- The browser displays a page titled "Vite + TypeScript" with a logo featuring a lightning bolt and the letters "TS".
- The **Console** tab shows the output of the application: `t1.ts is running`, `SOMETHING 11 false`, and `$! random`. Red boxes highlight the first two lines.

W01-P3: TypeScript tutorials (2)

=> Object Fundamental, npm run build error when typechecking failed

The screenshot shows a development environment with VS Code on the left and a Chrome browser on the right. In VS Code, the file `src/tutorials/t1.ts` is open, showing TypeScript code. A red box highlights a type error on line 41: `items[0].title = 'new book'; // Error: Cannot assign to 'title' because it is a read-only property.`. The `PROBLEMS` panel at the bottom shows the error details. The Chrome browser displays the Vite + TypeScript page, and the console shows the runtime output of the code, including the array `items` with its elements.

```
19
20 // #region Union Type
21 let tax: number | string = 10;
22 tax = 100;
23 tax = '$10';
24 // fancy name - literal value type
25 let requestStatus: 'pending' | 'success' | 'error' = 'pending';
26 requestStatus = 'success';
27 requestStatus = 'error';
28 requestStatus = 'random';
29 console.log(tax, requestStatus);
30 // #endregion
31
32 let car: { brand: string; year: number } = { brand: 'toyota',
33 car.brand = 'ford';
34 // car.color = 'blue';
35 let car1: { brand: string; year: number } = { brand: 'audi', y
36 // let car2: { brand: string; year: number } = { brand: 'audi'
37 let book = { title: 'book', cost: 20 };
38 let pen = { title: 'pen', cost: 5 };
39 let notebook = { title: 'notebook' };
40 let items: { readonly title: string; cost?: number }[] = [book
41 items[0].title = 'new book'; // Error: Cannot assign to 'title'
42
43 console.log(items);
44
```

Chrome Console Output:

```
t1.ts is running
SOMETHING 11 false
$10 random
[
  {
    0: {title: 'new book', cost: 20}
    1: {title: 'pen', cost: 5}
    2: {title: 'notebook'}
    length: 3
    [[Prototype]]: Array(0)
  ]

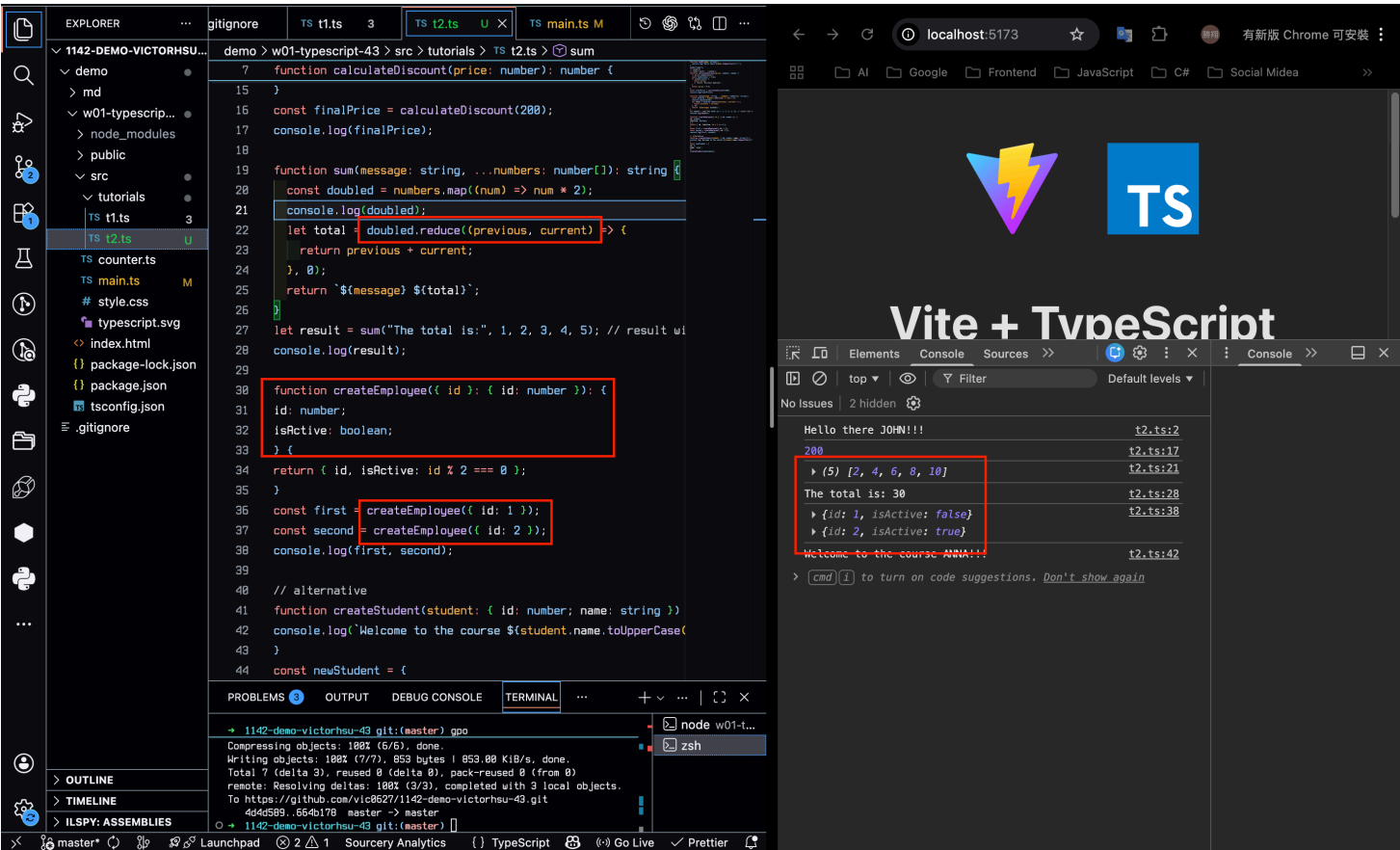
```

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W01-P4: TypeScript tutorials (3)

=> Function Fundamentals



74c4b84 victor_xu Sat Feb 28 12:14:45 2026 +0800 W01-P4: TypeScript tutorials (3)

W01-logs: git logs of W01

