

A decorative graphic on the left side of the slide featuring four hexagons. A large orange hexagon is the central element. To its top-right is a medium blue hexagon. To its bottom-left is a small white hexagon with a dark blue outline. Below the large orange hexagon is a small light orange hexagon.

The Chronicles of Incompetence

By: gifHub

**gifHub: in the
beginning**





Now



What changed?



Not our spirit for un-single-ing
comp sci students!

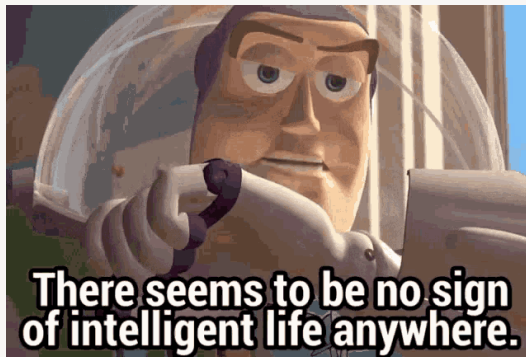


What this seminar is about

It's a story of 5 4th year computer science students who are inept at full stack software development

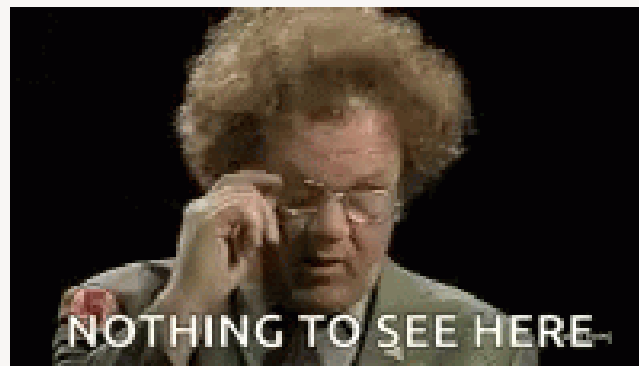
4 difficulties (of many) we encountered:

1. The technical debt from the sign-up form was the product of a YouTube tutorial
2. Our branching strategy (or lack thereof)
3. Someone on the team thought storing the JWT on the client side would be a great idea and everyone just went with it
4. Front end tests failed on GitHub, despite working locally



Sign up form

- A textbook example of reckless deliberate technical debt
- We needed a multipage signup form
- What other answer is there but to blindly follow a YouTube tutorial when you don't even know where to start
- As time went on though, it became evident that we would need to refactor a bunch of code to achieve the functionality we wanted but no one had the time
- So naturally instead of fixing it we cooked up a band aid solution and closed the issue....



Sign up form

- The problems didn't stop there
- The sign-up form frontend code used keys that didn't match the backend:

```
csInterests: [],  
noncsInterests: [],
```

```
interests: [String],
```

Despite all the work we did on the frontend and backend, we got 0 for the matching feature because the backend ppl didn't talk to the frontend ppl

Solution:

- Talk to each other every once in a while
- Add backend documentation

Branching problems

Problem 1:

- The night of the due date, branches were popping up left and right
- Members would be adding code to branches that were outdated or contained code with bugs
- Made it very challenging to collaborate and get the work done

Solution:

- We learned that most professional teams (i.e. the exact opposite of us) would work on their own branch
 - Once the group member finishes their feature/bug fix/etc. the branch would be merged with develop and deleted
- Also, if we were smart, we would have rebased our branch with develop often
 - Keeps the commit history consistent
 - Allows merge conflicts to be addressed locally

Source: <https://opensource.com/article/20/7/git-best-practices>



Dingyuan Yesterday at 9:49 PM
can u push it?



bree123. Yesterday at 9:50 PM
sorry to which branch again lol
my last brain cell is fighting for its life rn



JapanEngineer · 1y ago

If this was an accident, I'd be annoyed.

If it was done on purpose, I'd be livid.

A personal GitHub branch is like a toothbrush. You don't use someone else's unless you have permission.

Branching problems

Problem 2: did not understand why git pull provided error messages for divergent branches

- Every so often, we would do git pull (without a sound understanding of what this command is even doing) and we weren't able to proceed without specifying how to handle the divergent branch
- This problem would come up often because we were all working off the same branch 😊



Menti Question

[Results](#)



For the ppl who strongly disagreed:



Git pull = git fetch + git merge or rebase

- Git fetch = download all changes from GitHub without applying them (aka without modifying your working directory)
- When to use git pull: when you want to streamline updating your local copy with changes and don't care about reviewing the changes before merging
- When to use git fetch: when you want to assess changes to the code before incorporating them to your local copy

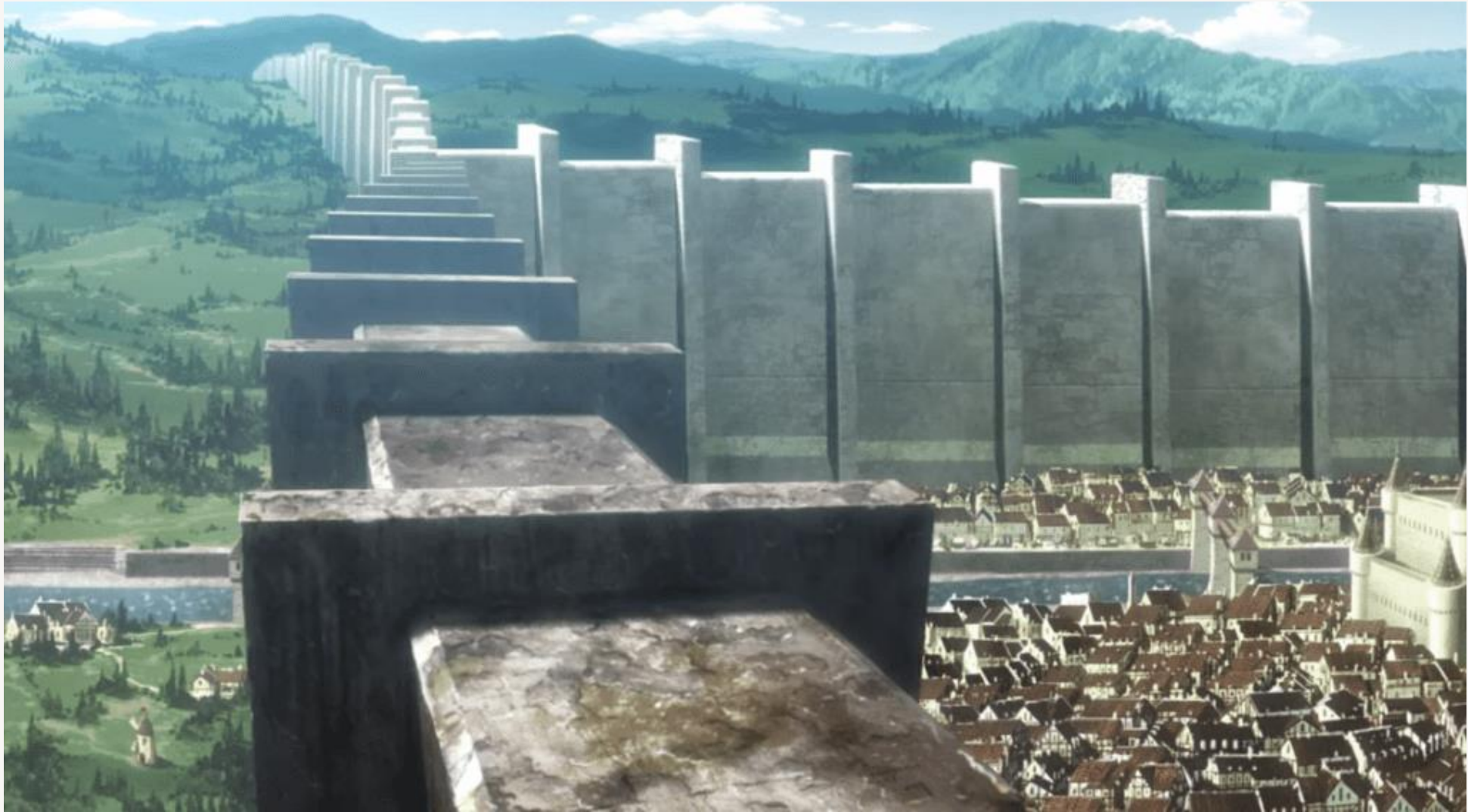
JWT

We wanted to make user authentication and authorization secure

We had good intentions!



The walls are secure



The walls are secure ???



The walls are secure



George Koniaris

So the answer is **My Soldiers** never store a JWT
in local storage.

Client side tests

It works locally. No reason it shouldn't work on git



**17 minutes
before deadline**

Expectation



Bochacho Yesterday at 11:42 PM

Just added front end tests to CI pipeline. Everything works!



Claustar Yesterday at 11:43 PM

Ofc it works! GifHub is a team full of the smartest devs!

Reality



Bochacho Yesterday at 11:42 PM

All tests for client side failed on github



Claustar Yesterday at 11:43 PM

seriously? bruh 🥲

Solution?



Bochacho Yesterday at 11:42 PM

All tests for client side failed on github



Claustar Yesterday at 11:43 PM

seriously? bruh 🥲

Solution?



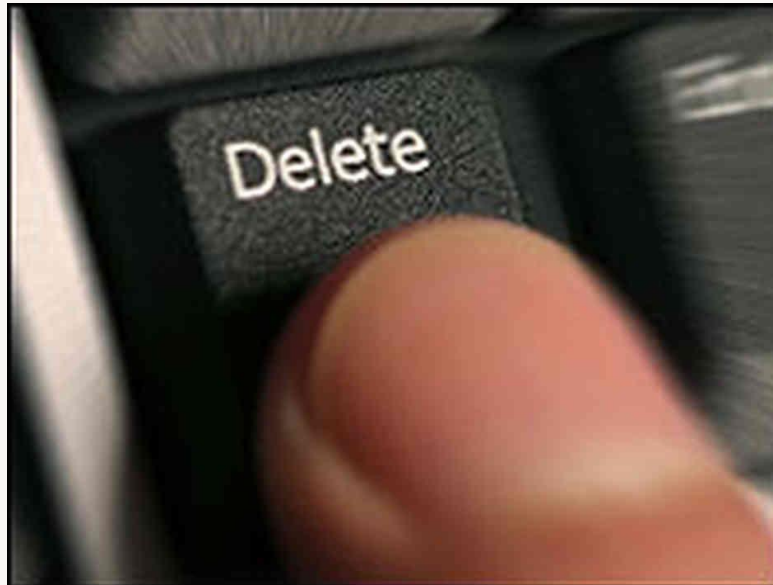
Bochacho Yesterday at 11:42 PM

All tests for client side failed on github so I removed them from github actions lol can't do much at this point



Claustar Yesterday at 11:43 PM

seriously? bruh 🥲



Just Kidding



What went wrong?



The solution:

- Don't procrastinate
- Assume things will break, always plan for the worst
- When you run front end tests, make sure the brain of your app is turned on or at the very least fake the brain
- Eat your veggies



Q&A