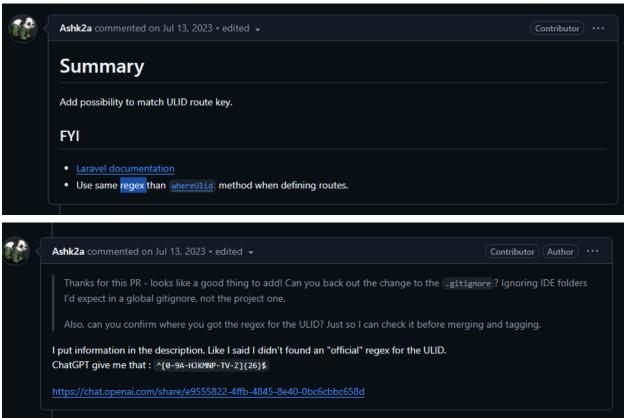
Patch Applied (PA):

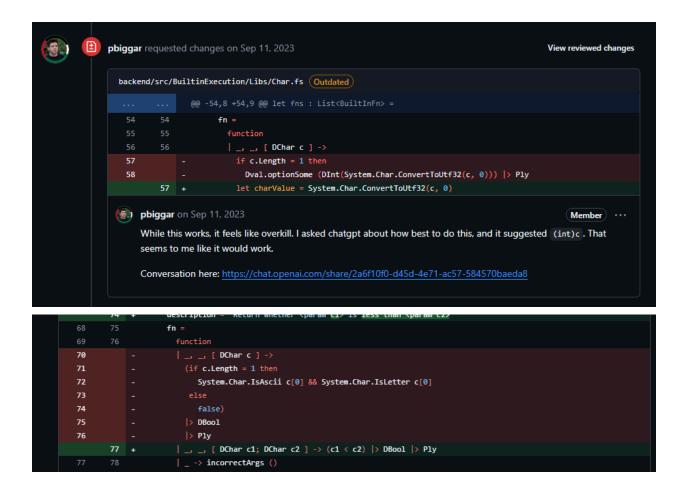
Utilizing chatGPT and applying the code suggestion fully is a useful idea because a lot of times, a developer would be confused on how to implement certain things and will turn to chatGPT as a final option. Developing regex patterns is something chatGPT is very good at and a comment question asked by Devs.



Despite the patch technically not being applied, I think the regular expression provided is still applicable to this point

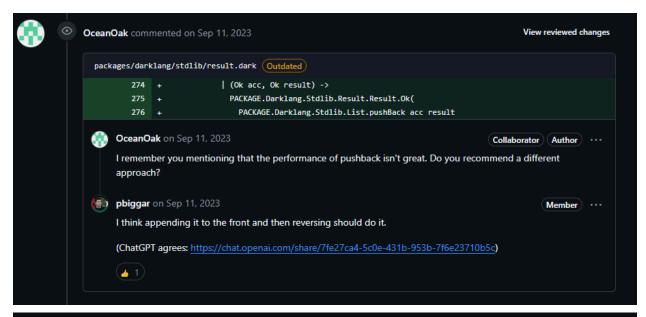
Patch Not Applied (PN):

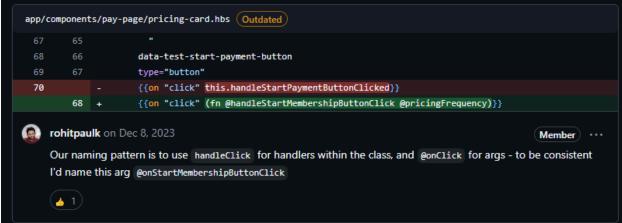
Other times, chatGPT can provide useful code that can not be incorporated fully be it because GPT lacks the full context or not everything it said would be useful to you. Thus, taking only partial code would be much better than taking everything GPT responds with. In this situation, a question of what kind of casting would be better. GPT will return example code along with its answers, obviously, the example code for the casting will not be necessary.



None Existent Patch (NE):

A lot of times, it would be useful to ask chatGPT just to provide some ideas on how to implement certain things. Direct code from AI may not be necessary as we see in the following pull requests. A simple insight is needed by the developer and asking chatGPT would be much faster than having the developer manually look through the code. Additionally, a simple insight for the efficiency for certain code is all that is necessary.





Task 2.1:

I provided code from a very old assignment where I presumed it can be improved with regular expressions. I asked ChatGPT to do so and what it gave out was very insightful.

URL: https://github.com/David1000734/CS472TeamsRepo/pull/31

Task 2.2:

Using code from another class, I sought to have ChatGPT explain a rather difficult subject in a very simple way by providing a user readme.

URL: https://github.com/David1000734/CS472TeamsRepo/pull/31

Task 2.3:

I used code from one of my personal projects where I used regular expressions to solve a problem that I originally thought would be a huge hassle. I realize that there may be people that are not familiar with RE so I asked ChatGPT to provide useful comments targeted to those people.

URL: https://github.com/David1000734/CS472TeamsRepo/pull/31

NOTE: I used the same pull request for all three tasks because I don't think I can make a separate pull request unless I create three separate branches to push onto main. I instead decided to just put them on one and link each of them to the issue.

Task 2.4: ChatGPT was consulted with to improve the workflow created before. This new workflow will include caching so that the python dependencies does not have to be rebuilt every time it is ran by the workflow.

```
- name: Set up Python

uses: actions/setup-python@v4

with:

python-version: 3.9

- name: Cache dependencies

uses: actions/cache@v3

with:

path: ~/.cache/pip
key: ${{ runner.os }}-pip-${{ hashFiles('requirements.txt') }}

restore-keys: |

${{ runner.os }}-pip-
```

This will ensure that each subsequent build will be faster than the last as well as freeing up some bandwidth.