Basic - Editors

EECS 201 Fall 2024

Submission Instructions

This assignment will be submitted as a repository on the EECS GitLab server (see Basic - Git 1). Create a private, blank, **README-less (uncheck that box!)** Project on it with the name/path/URL `eecs201-basic-editors` and add `brng` as a Reporter. The submission branch will be `main`. If this branch is not already the default initial branch, you initialize the local repo with an additional argument: `git init --initial-branch=main` or `git init -b main` if your version of Git is recent enough. Otherwise you can create a branch with this name after your first commit.

To finish the submission process and get your grade, you will need to run the autograder. You will need to SSH into the course server (see Basic - Intro):
`local$ ssh uniqname@peritia.eecs.umich.edu`
(the `local$` referring to a shell prompt on your system)

and then run `eecs201-test`:
`peritia$ eecs201-test basic-editors`
(the `peritia$` referring to a shell prompt on the server)

The repository should have the following directory structure, starting from the repository's root:

```
/
|-- file1.txt
|-- file2.c
|-- file3.sh
|-- report.txt
```

Optional Readings

Previous iterations of this class included some optional readings with this week. You may find the ideas and topics they bring up interesting.

Makers vs Managers

http://www.paulgraham.com/makersschedule.html
Maker's Schedule, Manager's Schedule, by Paul Graham, co-founder of Y Combinator.

Software Engineering in the Real World

http://www.joelonsoftware.com/articles/fog0000000069.html
Things You Should Never Do, Part I, by Joel Spolsky

> *It's harder to read code than to write it.*

When was the last time you saw a hunt-and-peck pianist? -Jeff Atwood, co-founder of Stack Overflow and Discourse. Some extras on the value of being a good typist and ditching the mouse for the keyboard.

Preface

In this assignment you'll be provided yet another zipped archive containing some starter empty files and scripts. Use your preferred tool to retrieve this file and extract it (see Basic - Git 1 if you need a review).

`https://www.eecs.umich.edu/courses/eecs201/fa2024/files/assignments/basic-editors.tar.gz`

Initialize a Git repository *inside of* the extracted `basic-editors` directory as per the submission instructions.

1 Jumping to a line

Open the `file1.txt` file. At line 420 there is a break in the pattern. Replace the text at line 420 with the number that fits in the pattern (each line is 4 more than the previous line). Your text editor may have the ability to jump directly to a given line: look it up!

2 Finding and replacing

Open `file2.c`. In it we have a function with the placeholder name `tmp_func`. Change the name of this function to `add_7`. Your editor might have the ability to find and replace all occurrences of a text pattern, or have an understanding of particular syntax so as to change function names.

3 Commenting out lines

Open `file3.sh`. From lines 2 to 1001, inclusive, are a bunch of shell commands. Comment them out by putting a `#` at the beginning on each of those lines. *Do not add or remove any additional lines.* Your editor may have an easy method to comment out selected/highlighted lines directly, or allow you to do the same edit to multiple lines at the same time.

4 Conclusion

1. Add and commit any changes you intend to submit.
2. Create a file called `report.txt`.
3. On the first line provide an integer time in minutes of how long it took for you to complete this assignment.
4. On the second line and beyond, write down what you learned while doing this assignment. If you already knew how to do all of this, put down "N/A".
5. Add and commit this `report.txt` file.
6. Run the autograder!