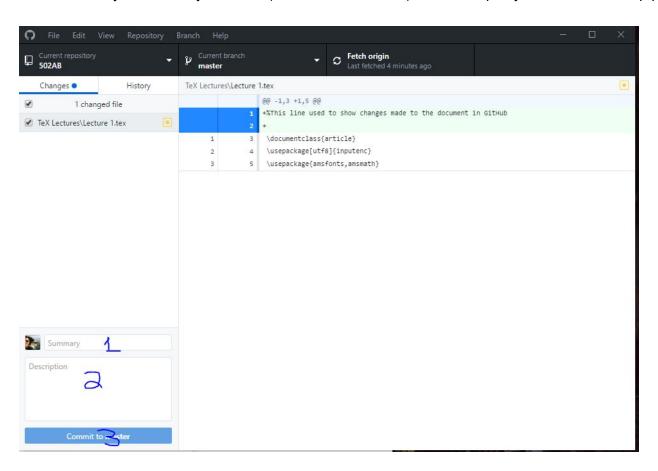
## GitHub Quickstart:

- 1. Create a github account: https://github.com/
- 2. Download and install Github Desktop: https://desktop.github.com/
- 3. When you have finished installing it, the program will ask for your github credentials. Log in.
- 4. You will have the option to "Clone Repository"
  - a. What is a Repository?
    - i. Pretend you wanted to put together a list of your favorite recipes and share them with your family and friends. A repository would essentially be the box in which you keep your little index cards with recipes written on it. Files in the repository would be the index cards with individual recipes.
  - b. Why am I "Cloning the Repository"?
    - i. Pretend your grandma had a box full of old recipes that you wanted to take for yourself. She has worked hard over the years putting them together, and loves her dishes. But sometimes the recipes might have errors, or sometimes you might have different taste preferences in a dish. **Cloning the repository** essentially allows you to make an identical copy of her recipes at that exact moment in time.
    - ii. When you make changes to recipes in your cloned repository, those are completely separate from Grandma's recipes (so you can't mess up any of her good cooking!)
- 5. Clone the repository jyontz/502AB
  - a. You will need to choose a folder in which you would like the "cookbook" to reside. I generally
    keep all of my git repositories in a folder in one place, usually at the top level directory (ie. C:\ or
    whichever folder is cd ~ on a unix/mac machine)
- 6. This will now checkout the files to your computer. Essentially you download all of the files from the cookbook to your local machine. Any changes you make to existing files, files you add or remove, or folders you make in your clone (also known as a fork) will show up in your Github Desktop program.



- 7. If you change one of your recipes and want to save it in your cookbook, you can check the changes you want to make, write a summary (1), write a description of what you did (2), and click "Commit to Master" (3). To push the updates to your Github repo online, you can go to "Repository > Push" on the menu bar and it will push your commits.
- 8. But say you check out the cookbook (make a clone) and grandma fixed a recipe, or added a new one. How would you know? That is exactly what Git is for. It is for version/source control, so that if you have multiple people collaborating on something, there is one master copy and everyone can propose changes on their own.

To update your repository to the latest version of mine (without losing your commits, by the way!), go to "Repository > Pull".

9. If you have made changes, it compiles in ShareLaTeX.com, and you committed them to your branch, you can go to <a href="https://github.com/jyontz/502AB">https://github.com/jyontz/502AB</a> and click on where it says "New Pull Request". You can then select the commits that you made in your branch that you would like **merged** with the master repository. This could be errata, new diagrams, whatever it might be.