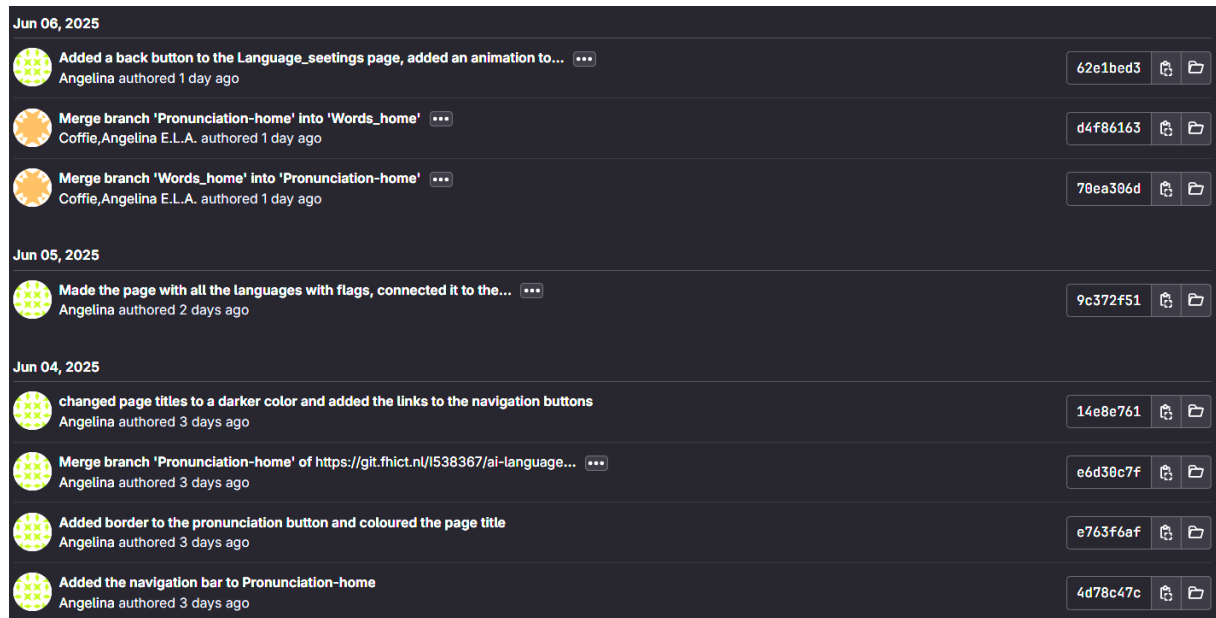# Git process

Previous semester I used GitHub. For me it looked easier to use, but this semester I started using GitLab because of the advice the teachers gave to use it in case something happens to GitHub. I found GitLab more challenging, because I had to use the terminal with all the commands I had to learn.

How git manages my workflow

For our group project we want to make an application. And for this to go well and avoid conflicts, we work in a git repository with multiple branches. Each team member on their own branch, like navigation bar, homepage or login page. We merge our files using merge requests in GitLab. By frequently committing with descriptive comments to GitLab it keeps a history of all our changes, with this we can easily undo mistakes. I think this is a nice way of working, you don't work on the same file at the same time, so you don't disturb each other while coding and this keeps our code organized and safe.

I'm trying to get used to using Git, often I face challenges that I have to figure out what it means.

Challenges I faced

Problem with switching branches

```
PS C:\ai-language> git branch
  Homepage
  Navigation
* Pronounciation-word-page
  Pronunciation-home
  Welcome_page
  Words_home
  main
PS C:\ai-language> git checkout Words_home
Deletion of directory 'public/word-sounds' failed. Should I try a
gain? (y/n) n
Deletion of directory 'public/words_family_level1' failed. Should
 I try again? (y/n) n
Deletion of directory 'public/words_family_level2' failed. Should
 I try again? (y/n) n
Updating files: 100% (125/125), done.
Switched to branch 'Words_home'
Your branch is ahead of 'origin/Words_home' by 1 commit.
  (use "git push" to publish your local commits)
PS C:\ai-language>
```

Sometimes when changing branches I would get: 'deletion of directory 'public/words-sounds' failed. Should I try again? (y/n)'. It deleted the files, and it kept showing this without changing to the other branch. But after trying for a long time, I got know that I have to keep answering no and ultimately it will change to the other branch.

Merge conflict

Merge blocked: 1 check failed

● Merge conflicts must be resolved.

Merge details

- The source branch is 1 commit behind the target branch.
- **9** commits and **1** merge commit will be added to Words_home.
- Source branch will not be deleted.


```
HEAD//our changes                                                                   Use ours
.nav-words-outer, .nav-words-outer-2{

.nav-words-outer, .nav-words-outer-1, .nav-words-outer-2, .nav-words-outer-3, .nav-words-outer-4 {
origin//their changes                                                               Use theirs
    display: flex;
    flex-direction: column;
    align-items: center;
@@ -58,63 +59,72 @@ font-family: inter;
    font-size: 14px;
    font-weight: 100;
```

I wanted to merge two files, and the merge got blocked. There were merge conflicts I had to resolve. I could resolve them in Gitlab. I had to choose 'Use ours' or 'Use theirs'. I chose 'Use theirs', because it was the updated version of the code. After this could continue my merge and could also see that the changes were made through the terminal in VScode.


```
PS C:\ai-language> git pull
Updating 9c372f5..d4f8616
Fast-forward
 public/pronunciation_pages/familie.html      |   0
 public/pronunciation_pages/huis.html         |   0
 public/pronunciation_pages/pronunciation.html | 117 +++++++++++++++
 public/pronunciation_pages/restaurant.html   |   0
 public/pronunciation_pages/school.html       |   0
 public/pronunciation_pages/supermarkt.html   |   0
 public/pronunciation_pages/tijddagen.html    |   0
 src/navigation.css                           |   2 +
 src/pronunciation.css                        | 176 ++++++++++++++++++++++
 src/style.css                                |   0
 10 files changed, 295 insertions(+)
 create mode 100644 public/pronunciation_pages/familie.html
 create mode 100644 public/pronunciation_pages/huis.html
 create mode 100644 public/pronunciation_pages/pronunciation.html
 create mode 100644 public/pronunciation_pages/restaurant.html
 create mode 100644 public/pronunciation_pages/school.html
 create mode 100644 public/pronunciation_pages/supermarkt.html
 create mode 100644 public/pronunciation_pages/tijddagen.html
 create mode 100644 src/pronunciation.css
```

Merge conflict

> ⊖ **Merge blocked:** 1 check failed
>
> ⊖ Merge conflicts must be resolved.
>
> **Merge details**
> - The source branch is 6 commits behind the target branch.
> - **27** commits and **1** merge commit will be added to `Pronounciation-word-page`.
> - Source branch will not be deleted.

I wanted to merge two files again and had to resolve merge conflicts. I couldn't resolve the conflicts via Gitlab but had to do it locally in VScode.

I added the files. Then I made a commit and after this I pushed it to GitLab.


```
PS C:\ai-language> git add public/images/110-united\kingdom.svg
>> git add public/signup.html
>> git add src/App.css
>> # Voeg alles toe als je zeker bent:
>> git add .
>>
warning: could not open directory 'public/images/110-united/':
 such file or directory
fatal: pathspec 'public/images/110-united\kingdom.svg' did not
tch any files
PS C:\ai-language> git status
On branch Pronounciation-word-page
Your branch is up to date with 'origin/Pronounciation-word-page
```

```
All conflicts fixed but you are still merging.
  (use "git commit" to conclude merge)

Changes to be committed:
        new file:   public/Language_settings.html
        new file:   public/Sentences_pages/Sentences.html
        new file:   public/images/051-eritrea.svg
        new file:   public/images/055-india.svg
        new file:   public/images/063-somalia.svg
```

In the terminal I saw that it was successfully merged.


```
PS C:\ai-language> git push
Enumerating objects: 16, done.
Counting objects: 100% (16/16), done.
Delta compression using up to 16 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 2.53 KiB | 865.00 KiB/s, don
Total 6 (delta 5), reused 0 (delta 0), pack-reused 0 (fro
remote:
remote: To create a merge request for Pronounciation-word
isit:
remote:    https://git.fhict.nl/I538367/ai-language/-/merg
ts/new?merge_request%5Bsource_branch%5D=Pronounciation-wo
remote:
To https://git.fhict.nl/I538367/ai-language.git
   b87af84..11b5a7f  Pronounciation-word-page -> Pronounc
ord-page
```