

# HTML, CSS & Bootstrap

## Learning Path

HTML → create the structure  
CSS → style the structure  
JS → actions

round borders



FIFA World Cup

@FIFAWorldCup · Jul 7

If you could pick any five players in world football for a penalty shootout, who would you rely on?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

542

{ List

Text

Text

greyed... text =

normal

120

8867

↑

action happens

HTML → Hyper Text Markup Language → Markup Language

CSS → Cascading Style Sheet → Styling Language

JS → JavaScript → Programming Language

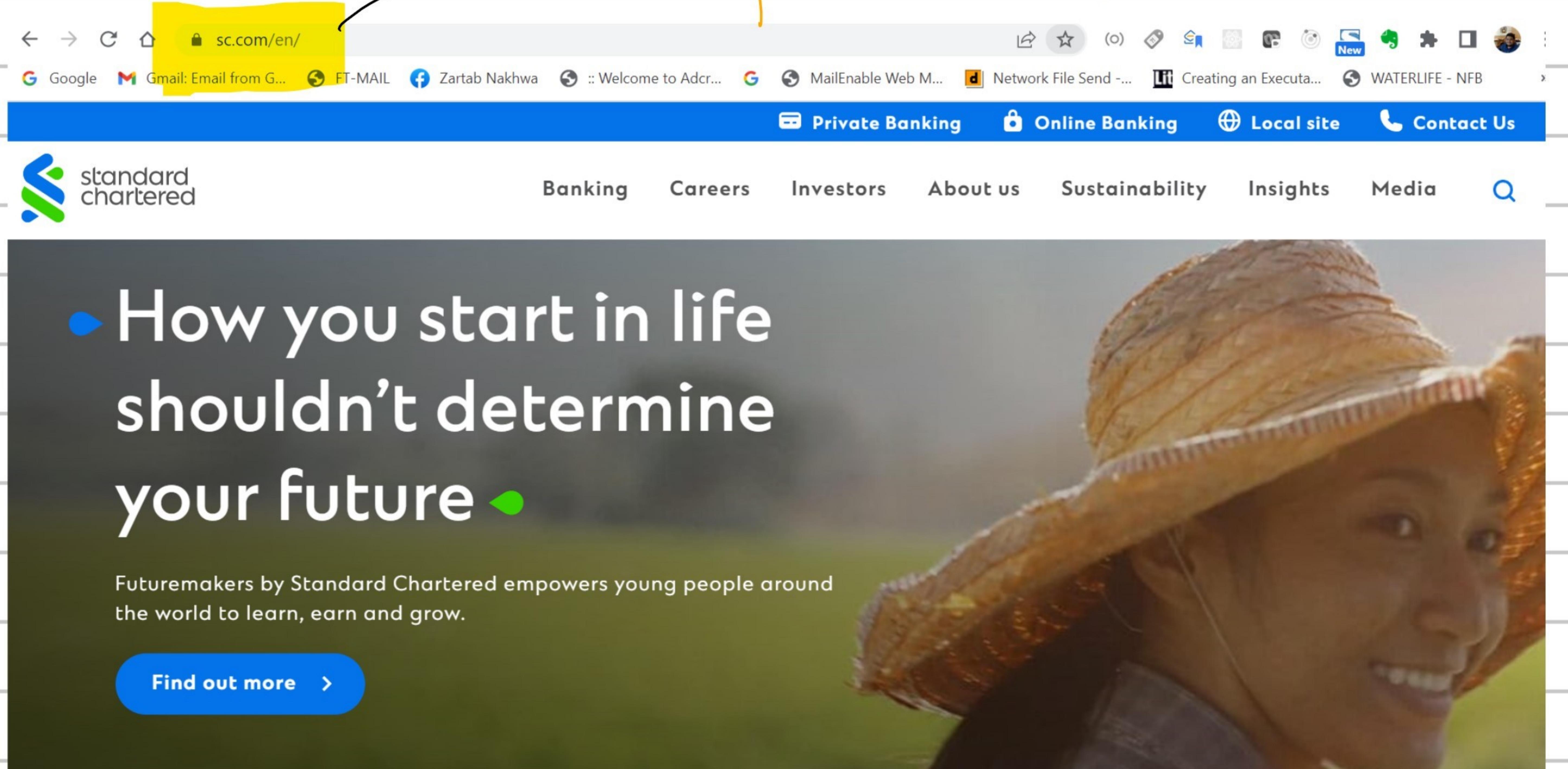
I HV → I Have Understood

R M → Revise Me

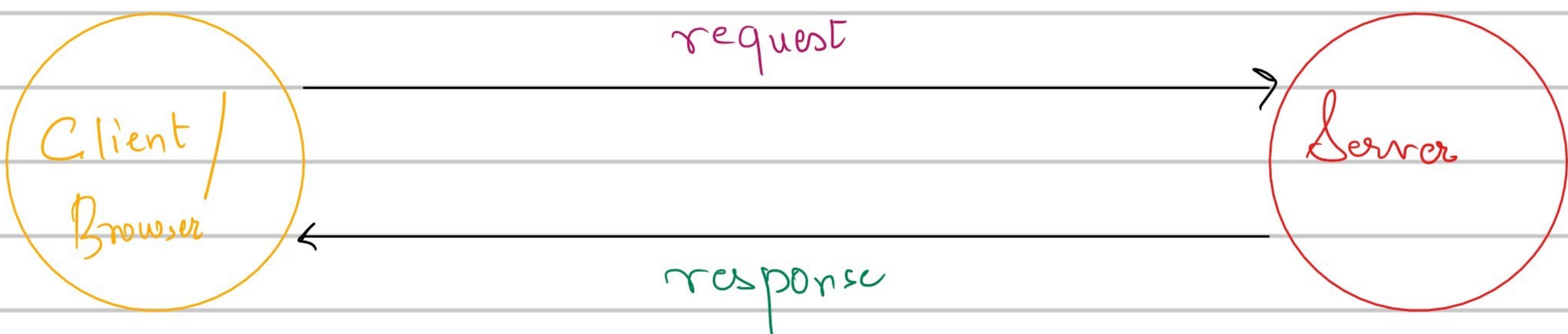
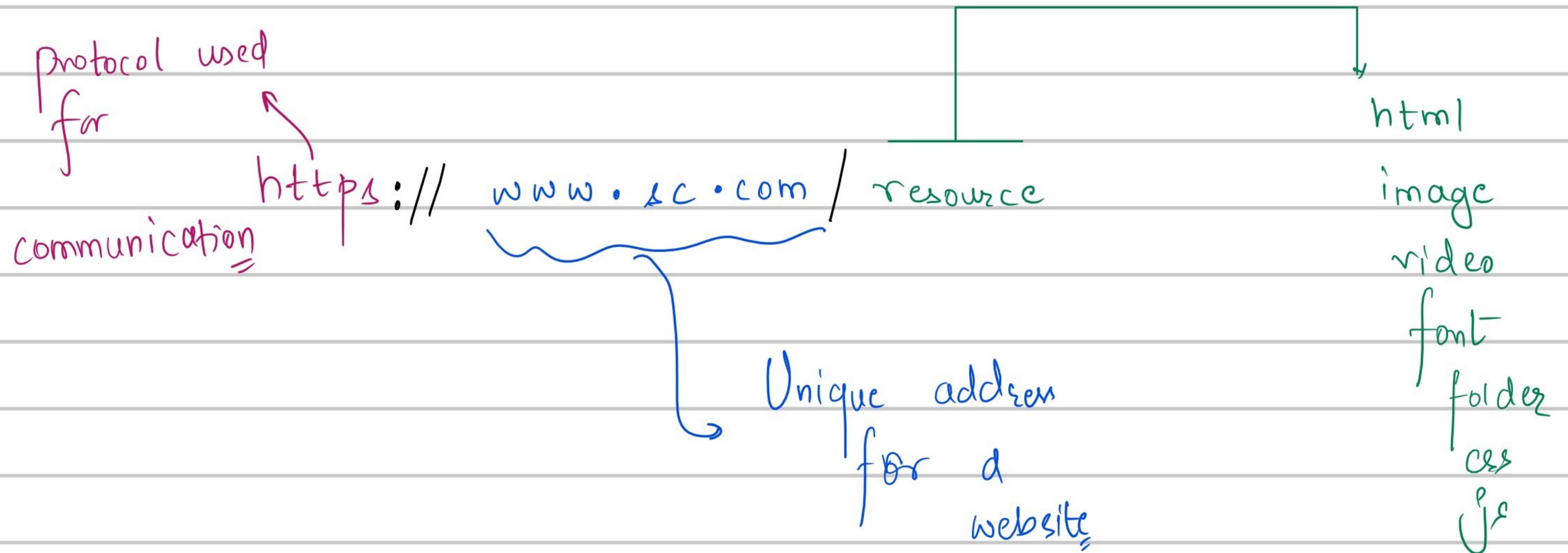
# How Web Works?

Makes a request for a resource

URL → Uniform Resource Locator



## STRUCTURE OF URL

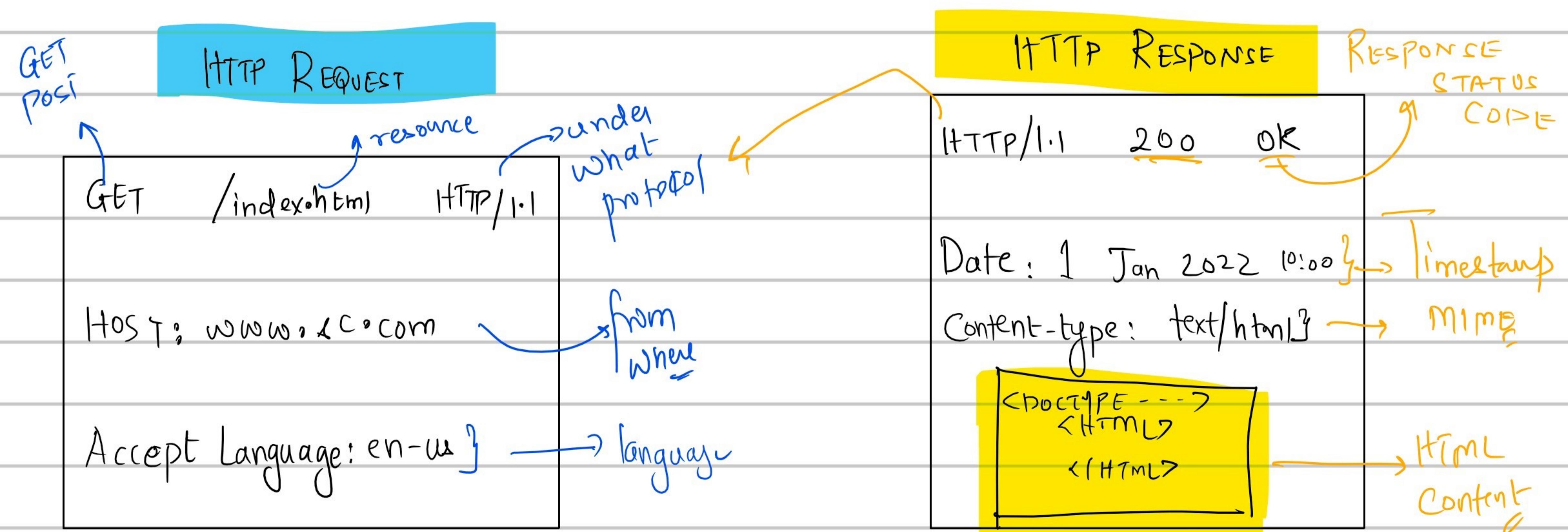
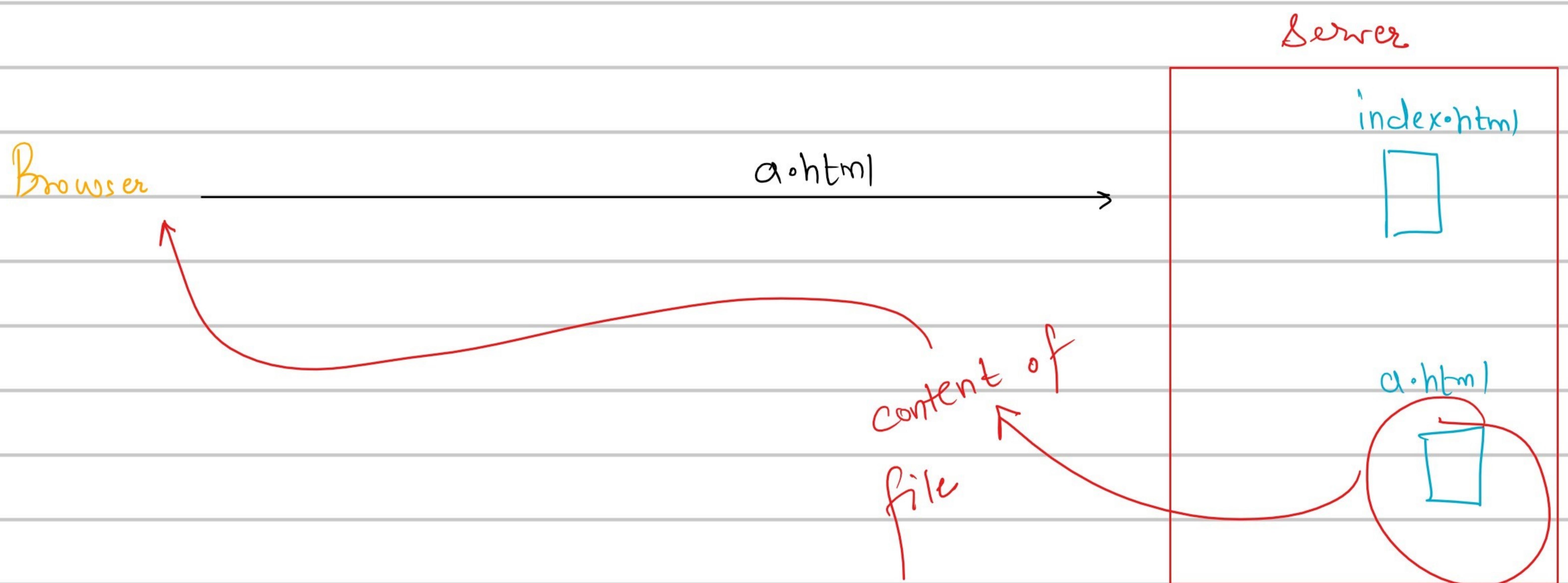


HTTP

Hyper Text Transfer Protocol

HTTPS

HTTP + Encryption =



→ space

## HTML

< tag → attribute value → attribute = value >

children

</tag>

Self Closing

<tag />

<html>

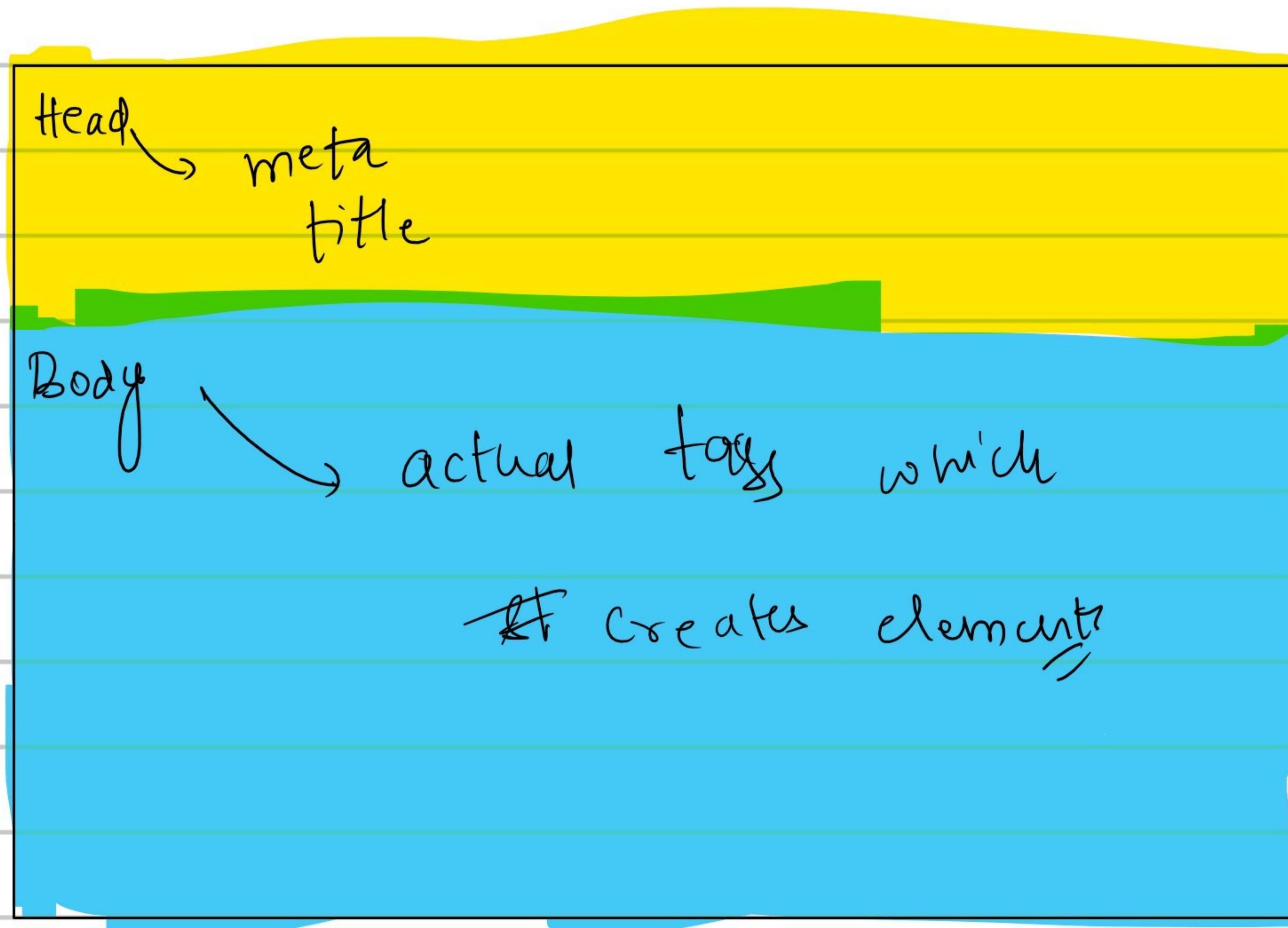
<head>

</head>

<body>

</body>

</html>



Container

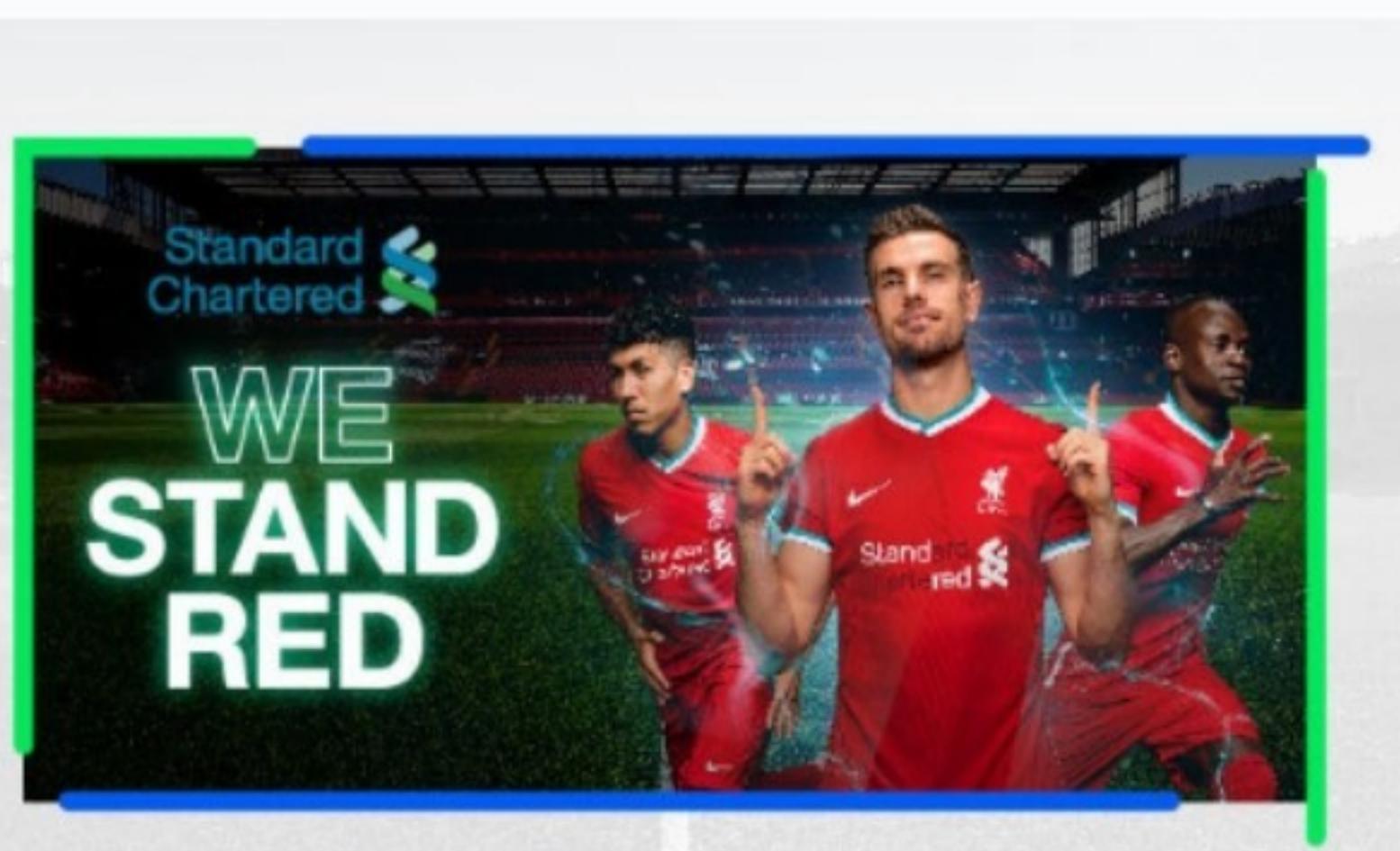
Banking Careers Investors About us Sustainability Insights Medi



### Be Fraud alert

We are aware of a number of scams and attempted frauds, including by companies posing as us, or individuals impersonating our staff

[Read more >](#)



### Live Red, Breathe Red, Stand Red

Standard Chartered has been the Main Sponsor of Liverpool FC since 2010. Join us as we create a host of unique experiences for our clients around the world

[#StandRed >](#)



### SC Ventures reports first quarter as separate segment

With the recent release of the bank's financial results, SC Ventures reports first quarter out as a separate segment.

[Learn more >](#)

dir

Block  
Element

Inline  
Element

Span

Block  
element

Span  
style separately

inline  
element

thead

row  $\rightarrow$  4th

4th

table

1  $\rightarrow$  1st

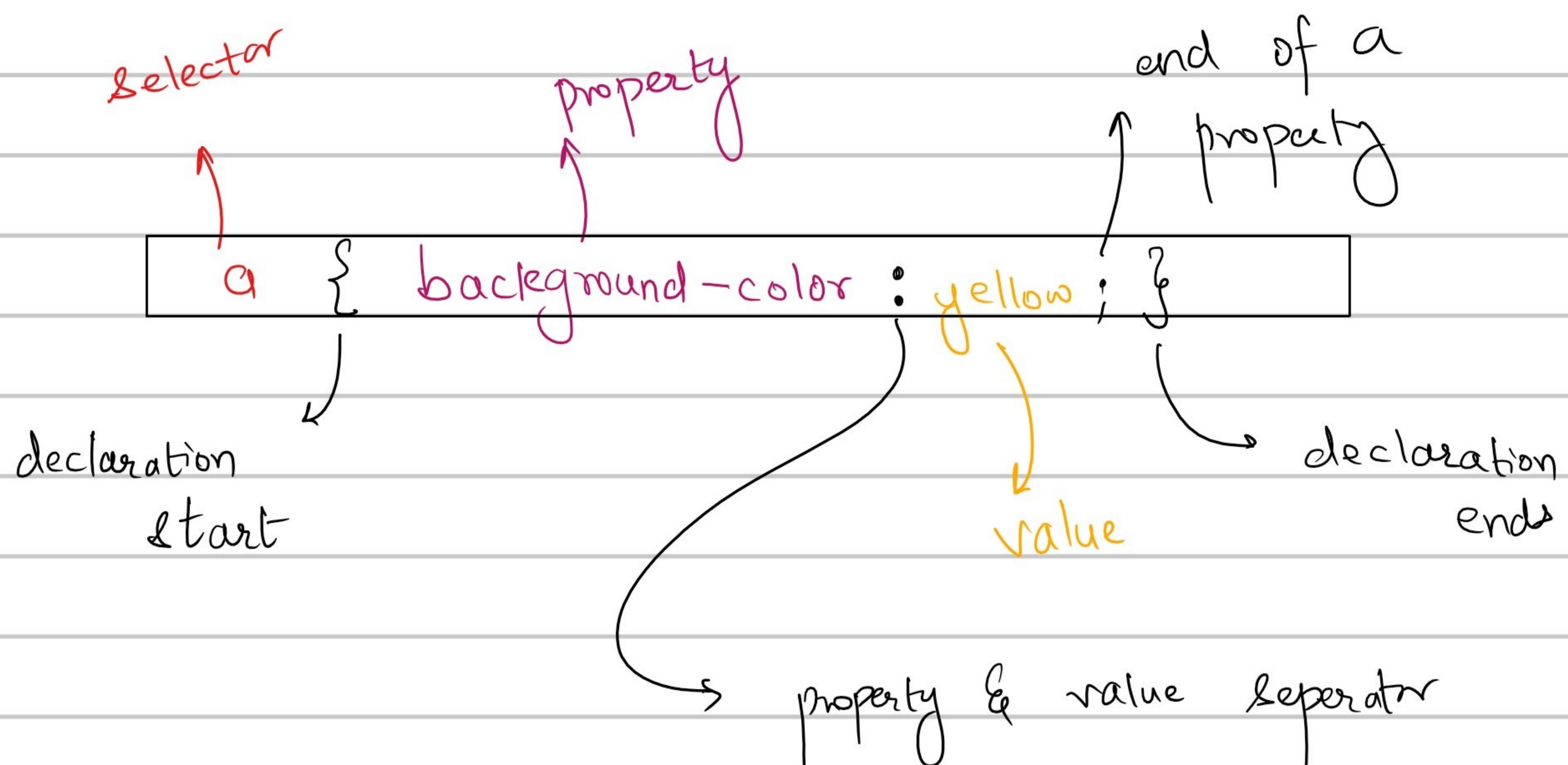
id	name	age	gender
1	Tom	25	m
2	Alex	26	m
3	Milce	27	m

## CSS

### ↳ Cascading Style Sheet

- it is not a programming
- it is a styling language
- layouts & designing

### CSS Selectors



CSS can be used in 3 ways.

① **Inline CSS** → directly applied inside the `style` attribute of HTML element

→ NO!!

② **Internal CSS** → use the `<style>` tag for CSS



CSS	HTML

③ **External CSS** → link an html to css file



# CSS Selectors

① Tag

② Id

③ Class

④ Attribute

⑤ Wildcard Selector.

Tag

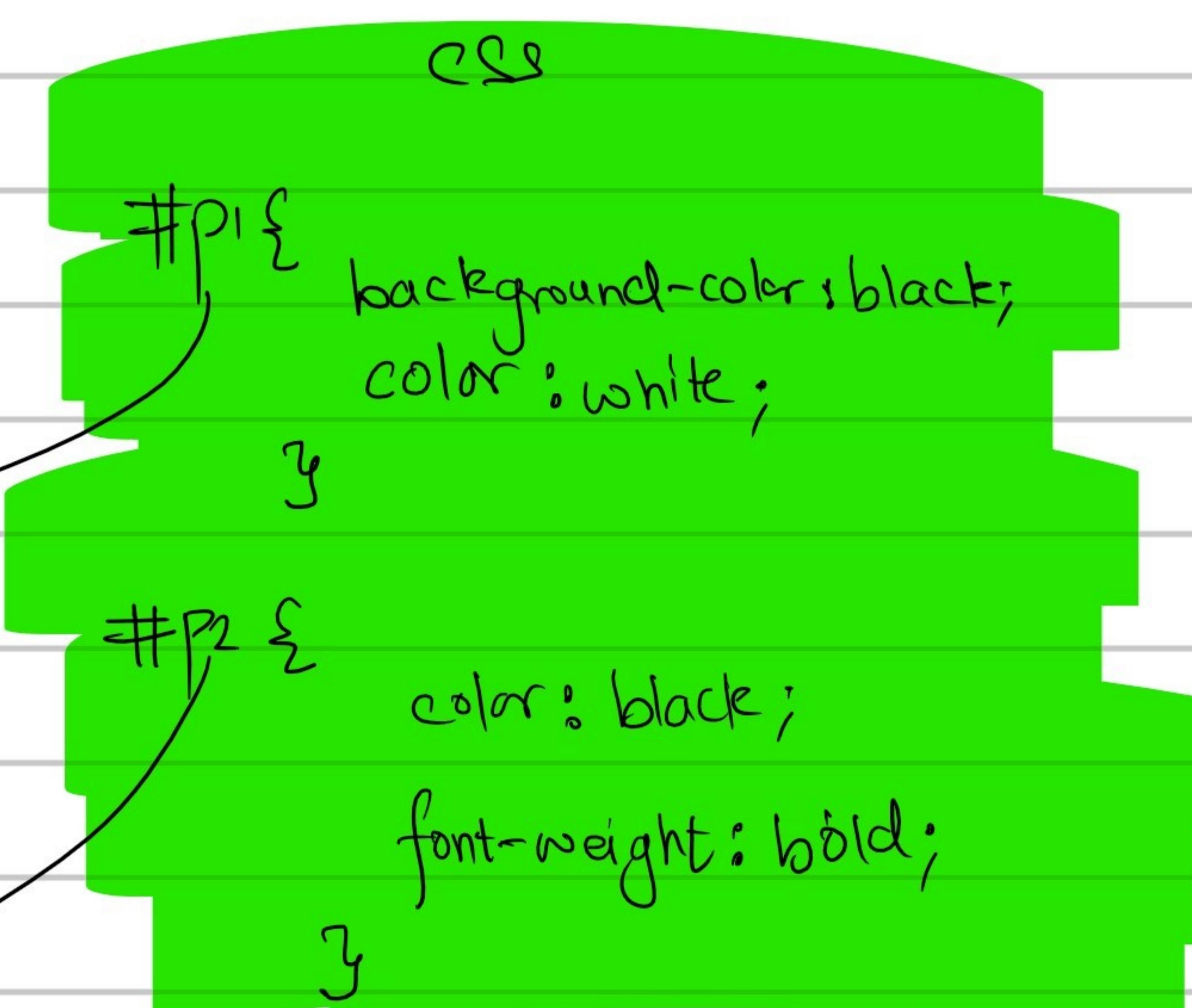
```
<html>  
  <head> </head>  
  <body>  
    :  
    :  
  </body>  
</html>
```



Id

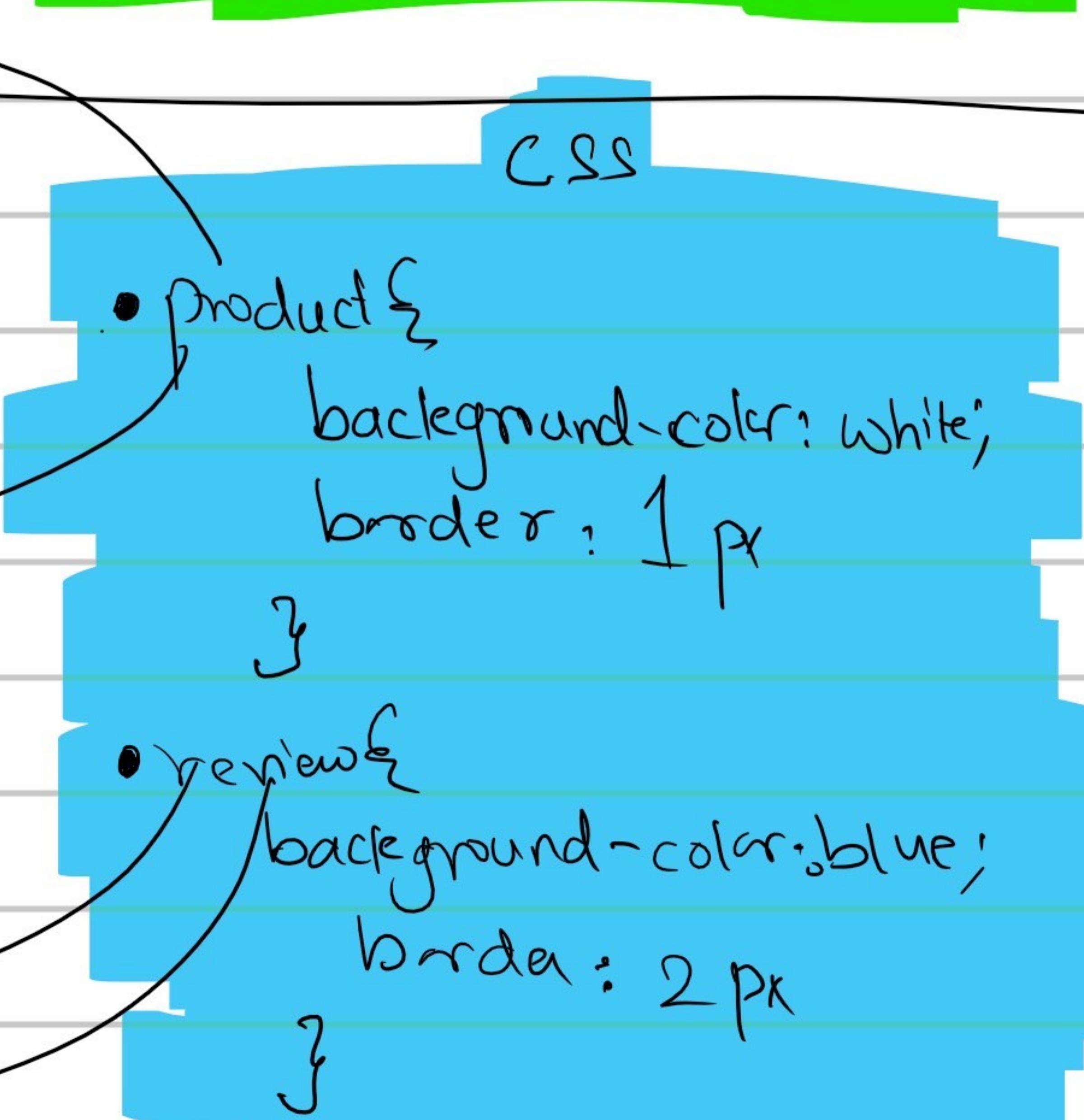
```
<body>  
  <p id="p1">  
  </p>  
<p id="p2">  
</p>  
</body>
```

id has to be unique across the page

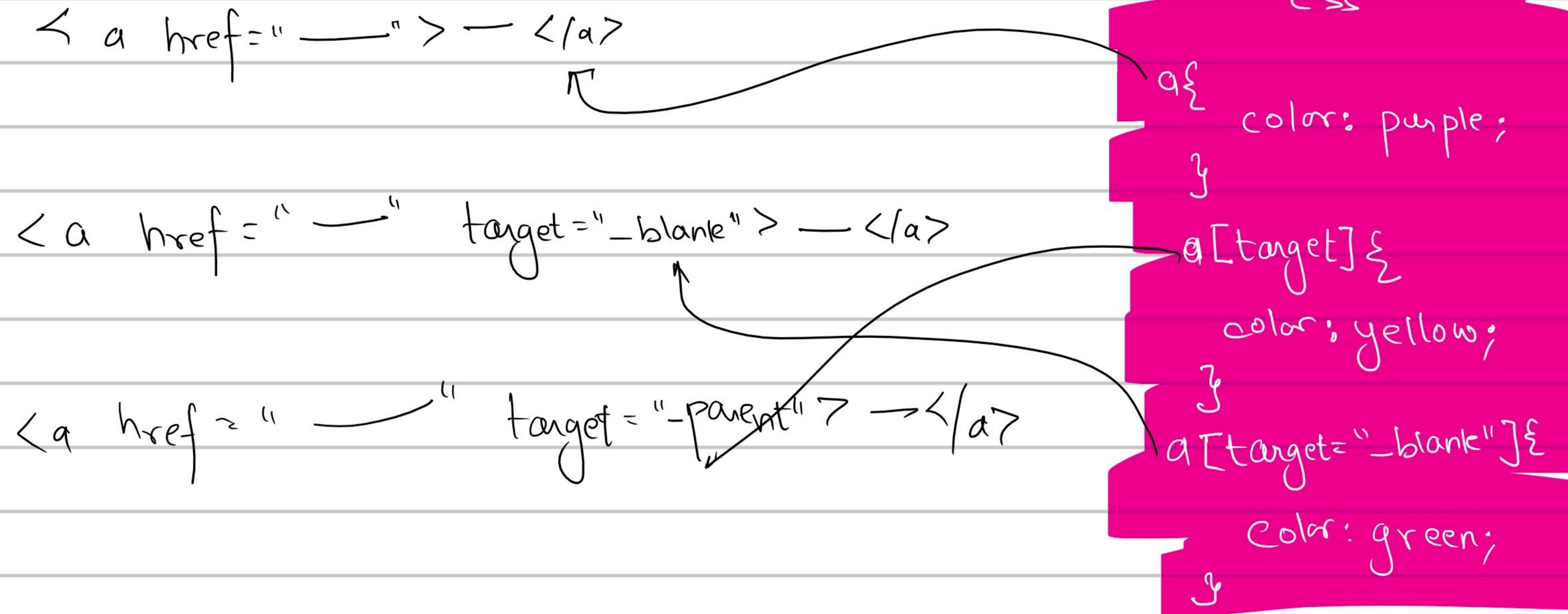


Class

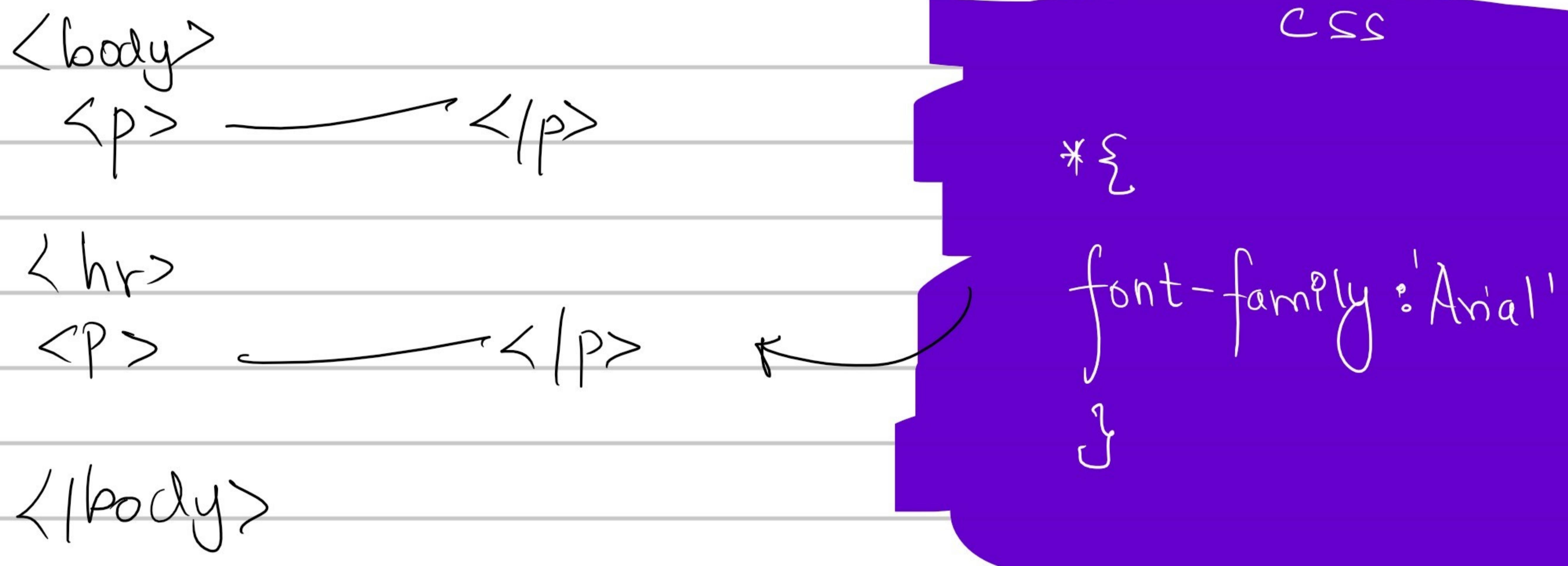
```
<body>  
  <div class="product"> </div>  
  <div class="product"> </div>  
  <div class="review"> </div>  
  <div class="review"> </div>
```



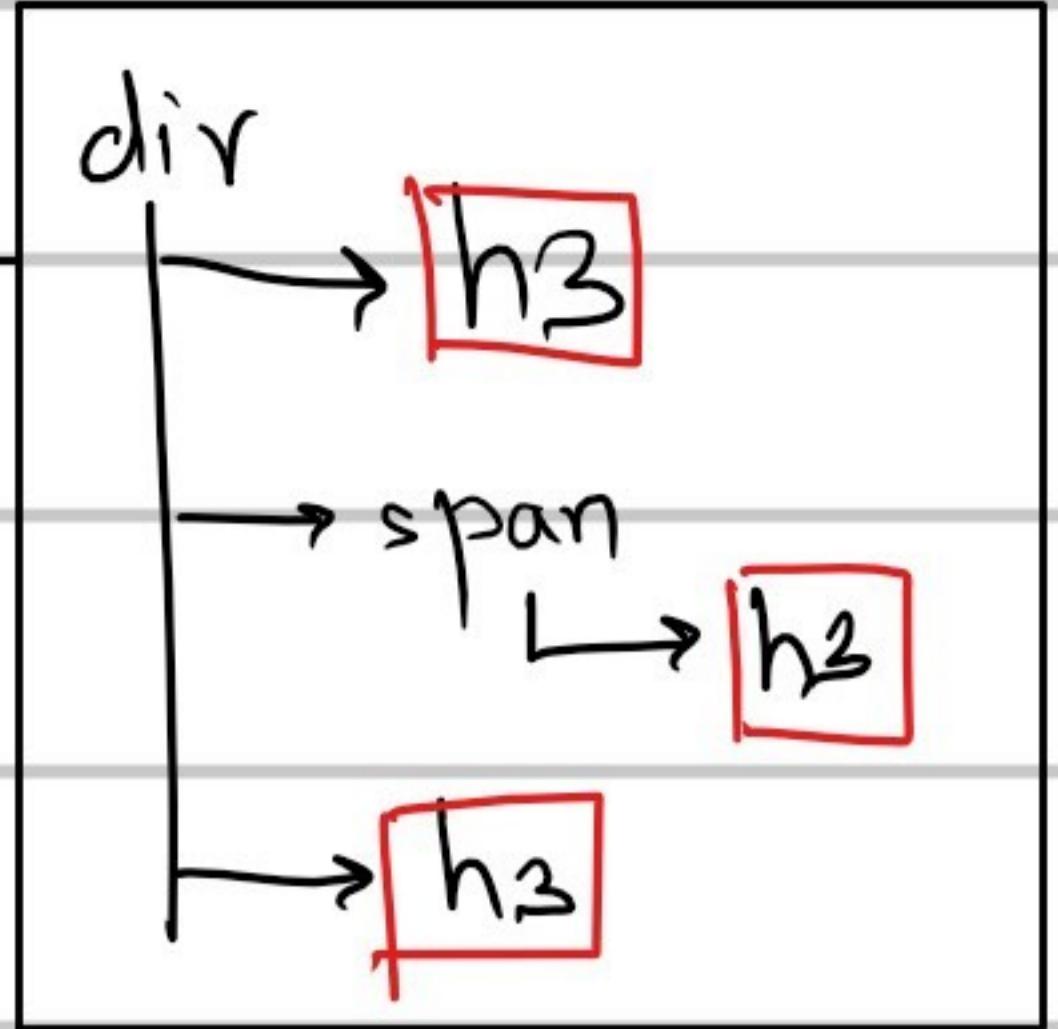
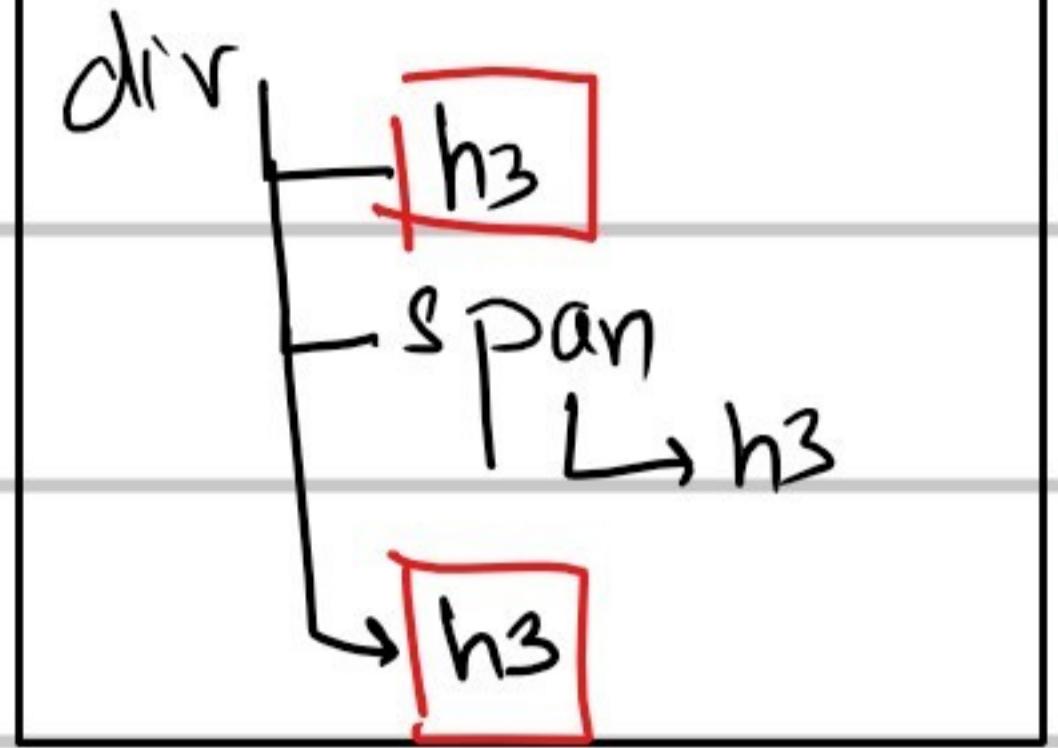
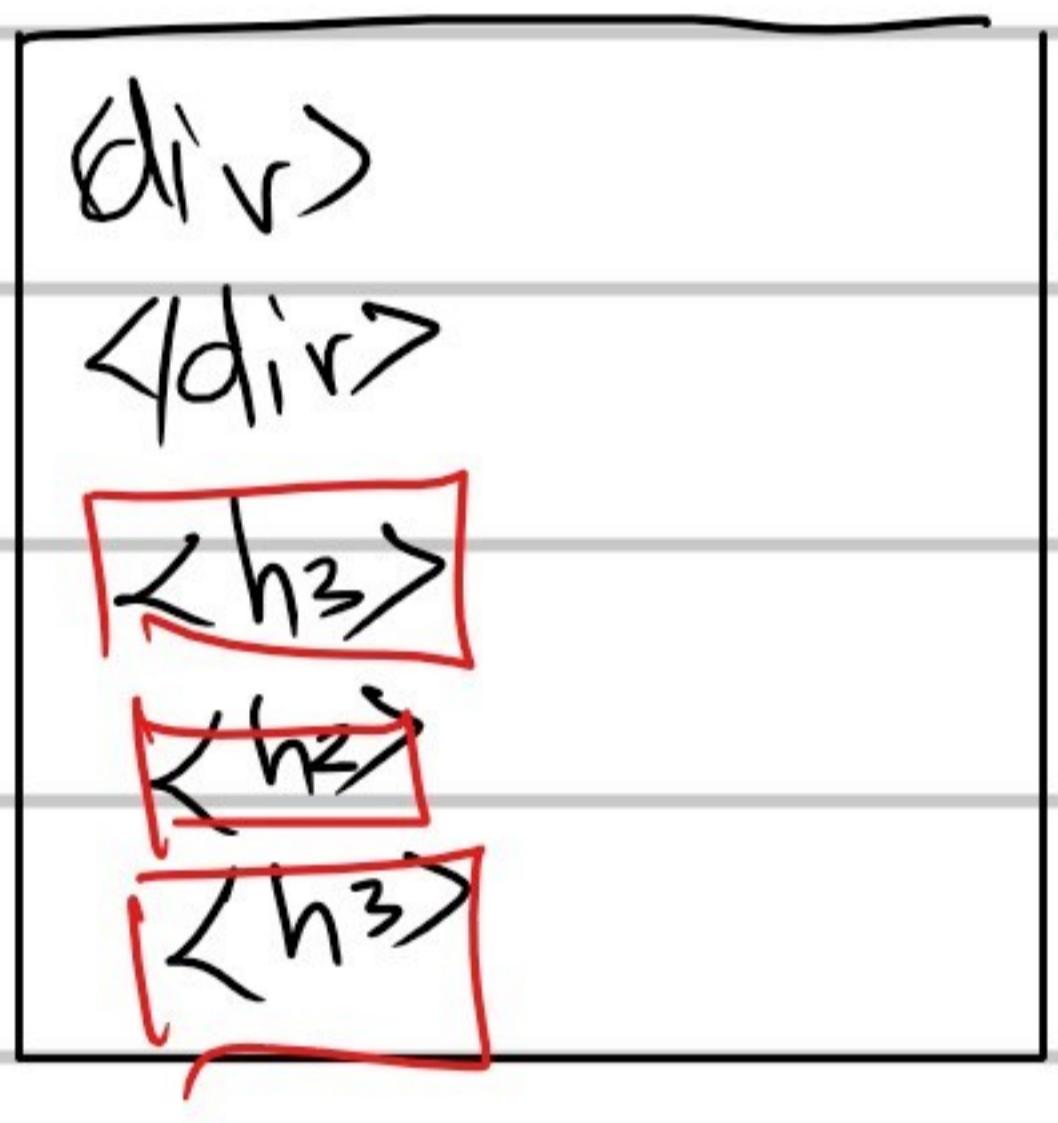
## Attribute



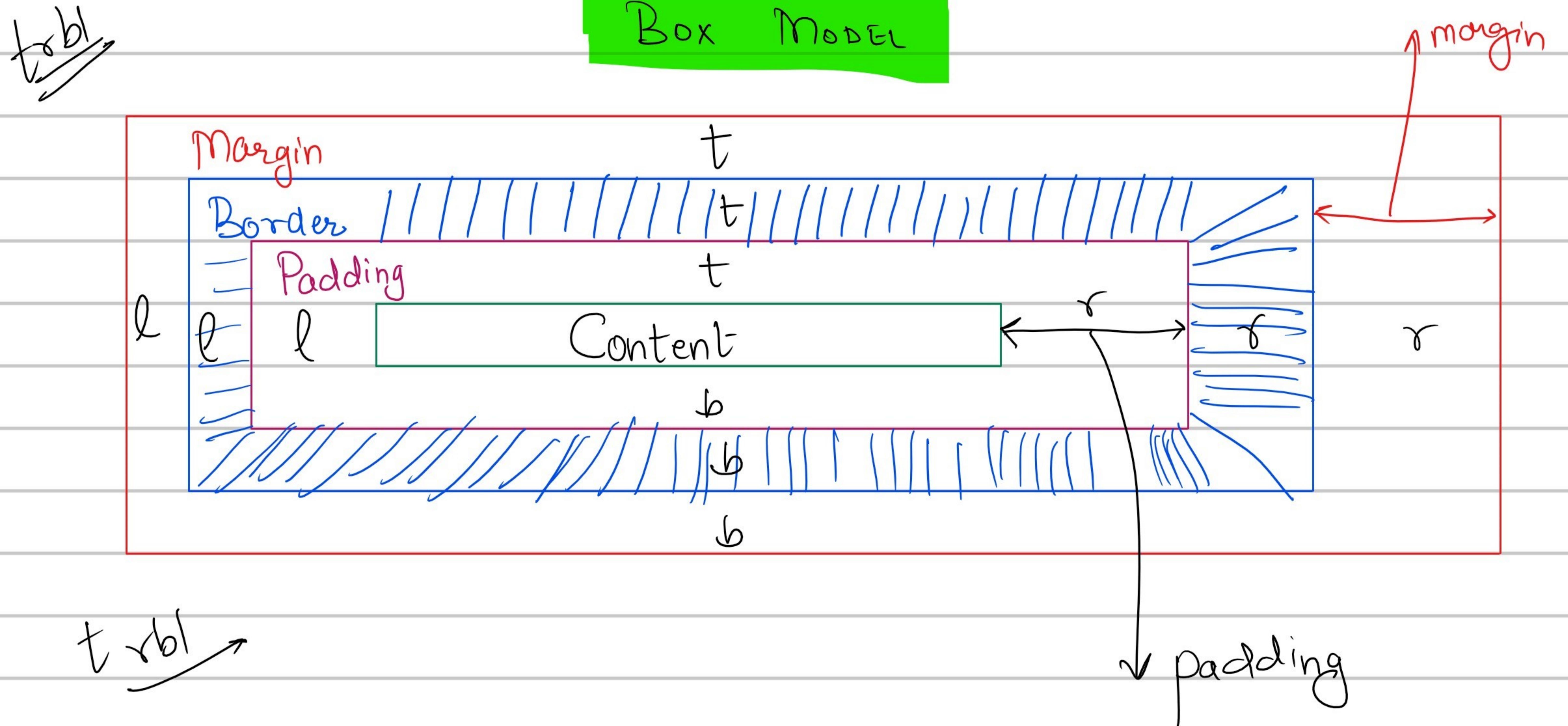
## Wild Card



## Combinator

Selector	Icon	CSS		every occurrence of the tag under the main tag
Descendant	Space	div>h3 { color: red; }		
Child	>	div>h3 { color: red; }		every direct occurrence of the tag
Adjacent Sibling	+	div+h3 { color: red; }		→ only the adjacent tag will be affected
General Sibling	✓	div~h3 { color: red; }		→ all occurrence of the tag after main tag

## Box Model



# Display Elements

none → removes the element completely

inline → displays an element like inline (no width & height)

inline-block → display an element with inline-block. (w & h)

block → display an element like a block

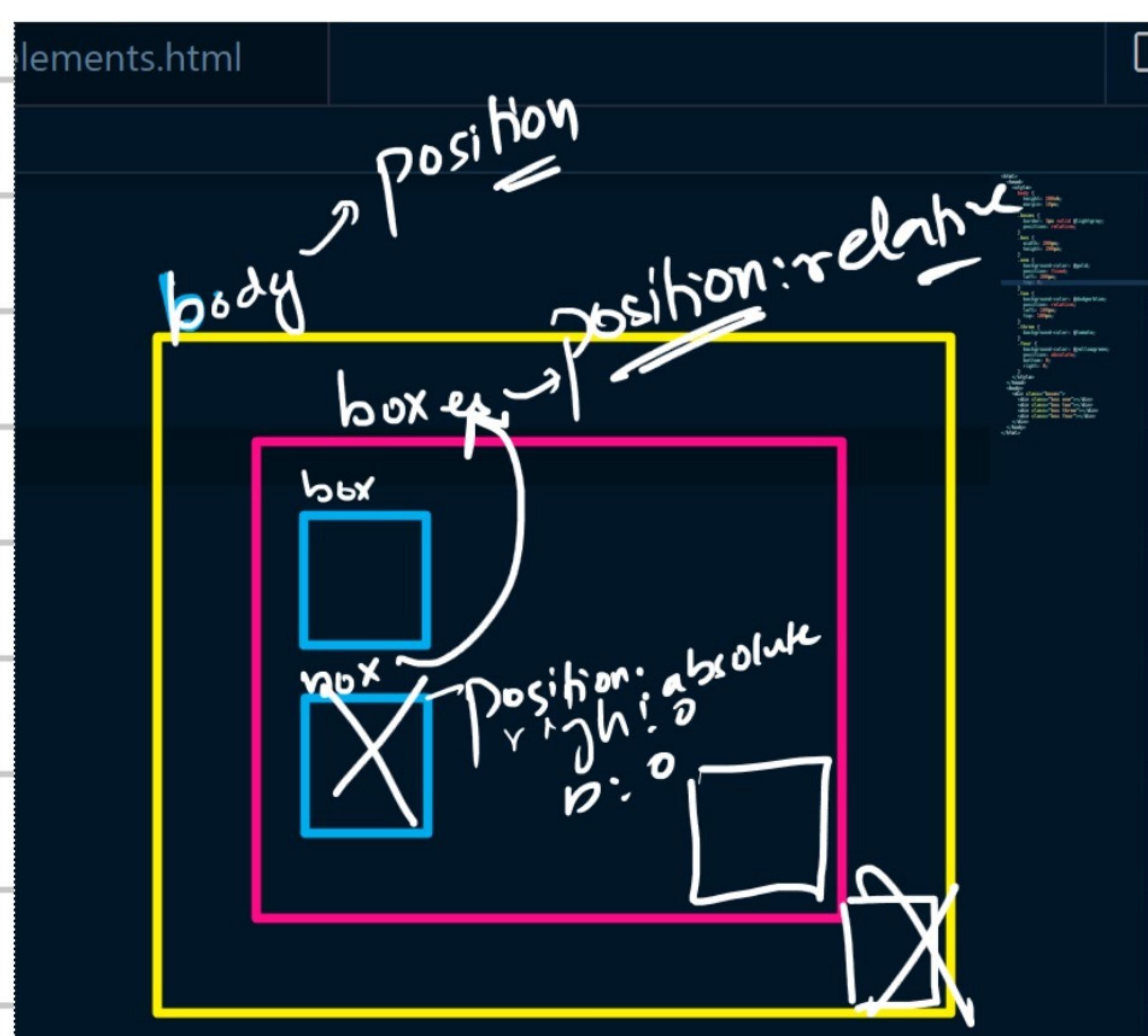
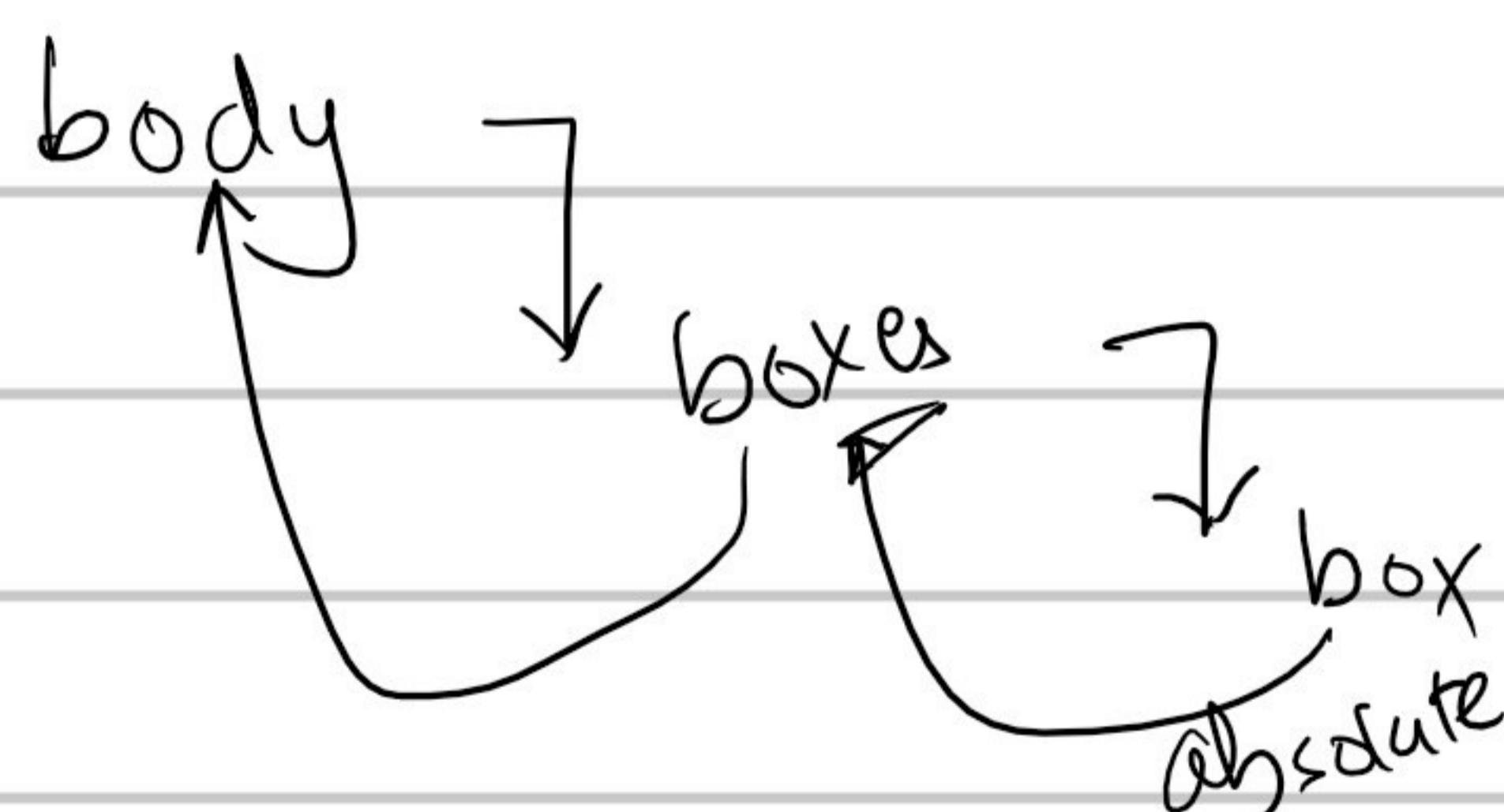
## Positions

static → default value → all the elements are in the order as they appear

relative → element is positioned relative to its normal position

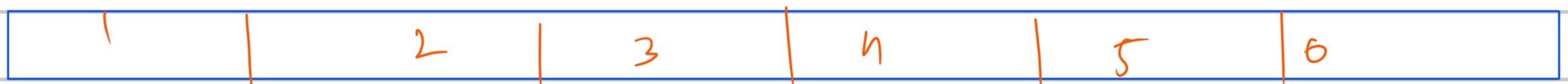
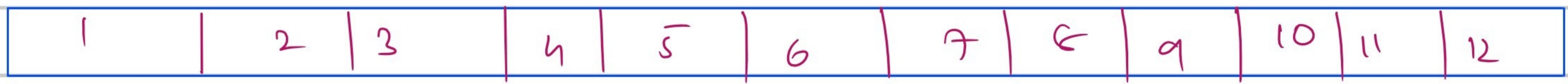
absolute → element is positioned absolutely to its first positioned parent.

fixed → element is fixed in context to browser window



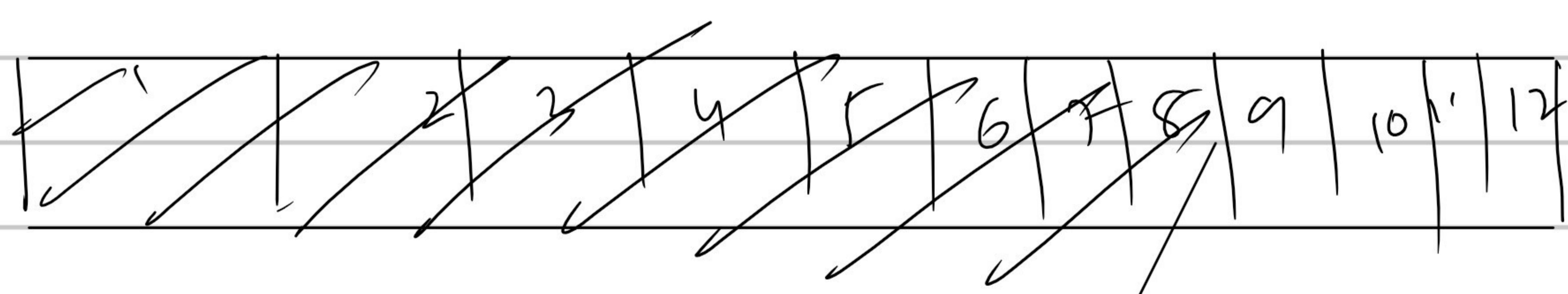
# Bootstrap

## Grid System



## Responsive Breakpoints

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	Extra large ≥1200px
<b>Max container width</b>	None (auto)	540px	720px	960px	1140px
<b>Class prefix</b>	.col-	.col-sm-	.col-md-	.col-lg-	.col-xl-
<b># of columns</b>	12				
<b>Gutter width</b>	30px (15px on each side of a column)				
<b>Nestable</b>	Yes				
<b>Column ordering</b>	Yes				

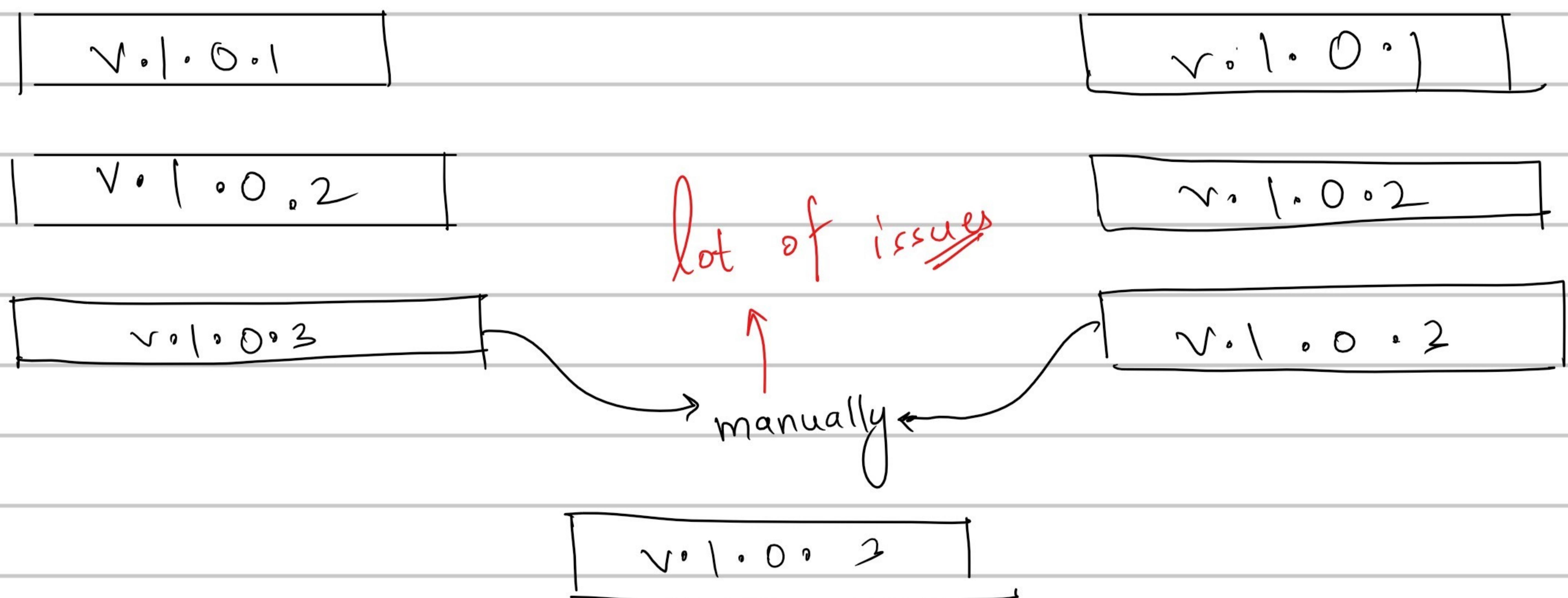


# Git

→ Version Control System.

Tom

Elizabeth



## Version Control System.

Source  
Code  
Management

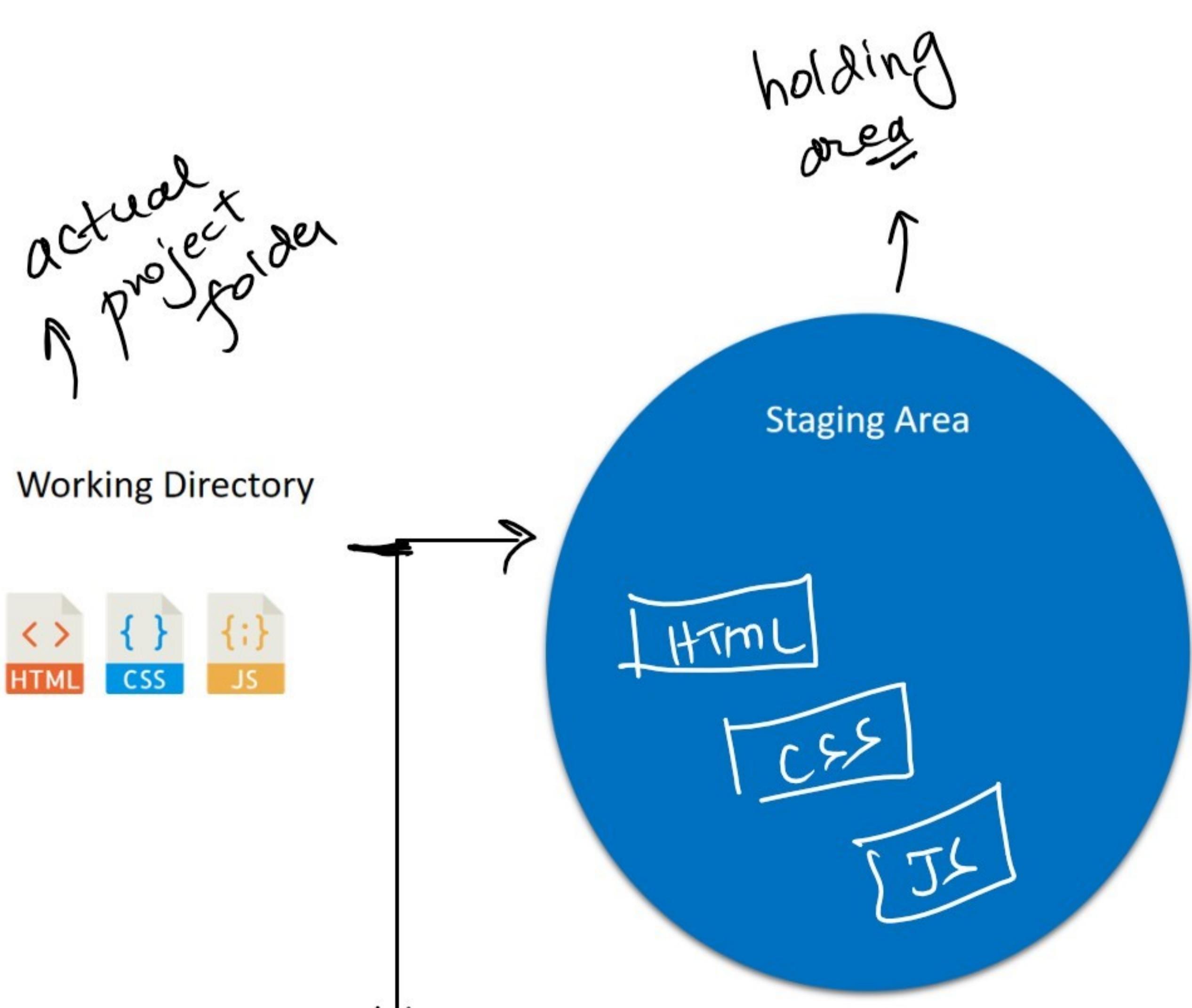
Track History

Work Together

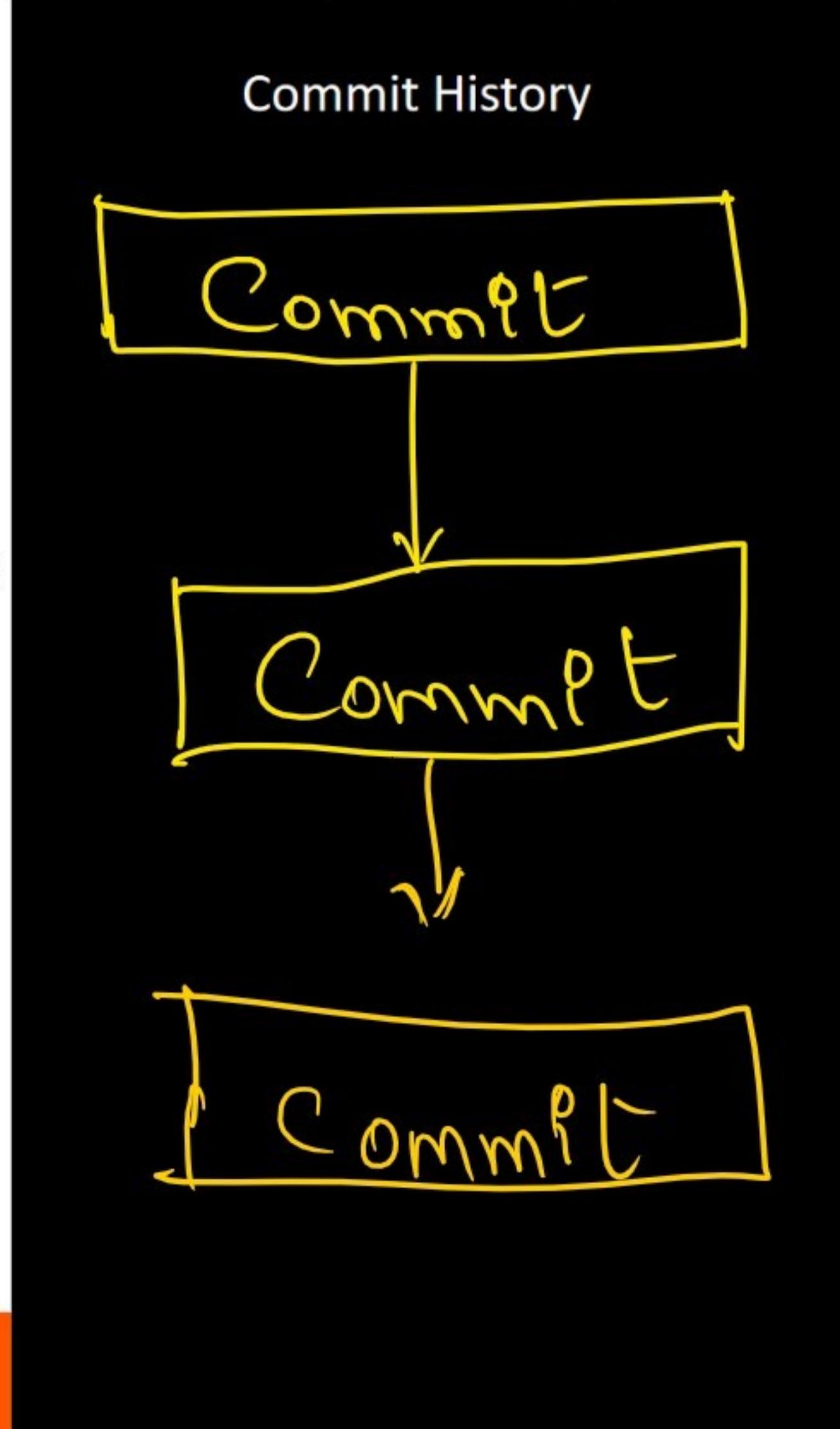
a system which maintains your codebase =

How Git works?

## LOCAL MACHINE



## Repository



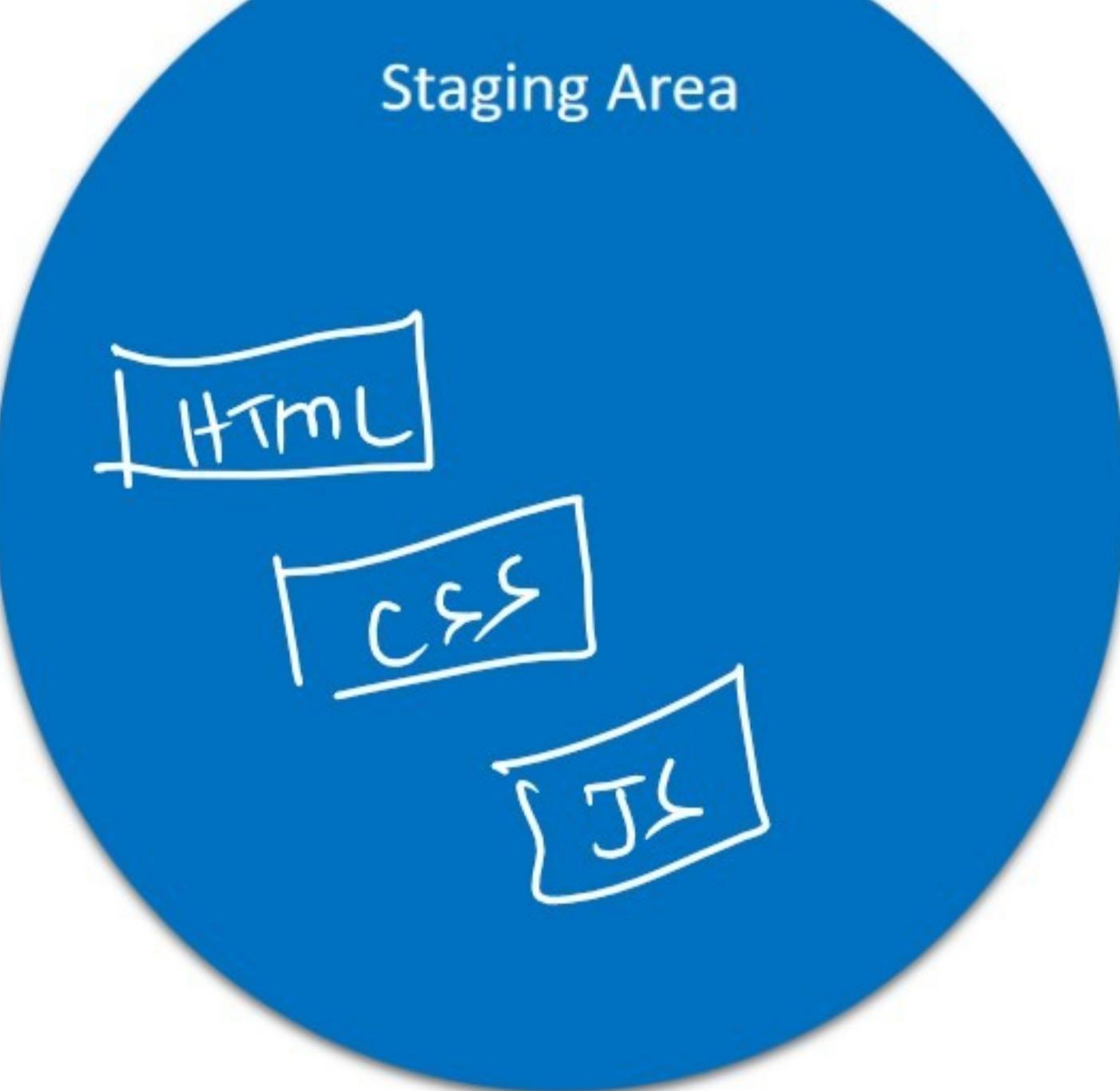
actual  
project  
folder

Working Directory



LOCAL MACHINE

holding  
area



git add HTML

git commit

Repository

Commit History

Commit

Commit

Commit

git push

REMOTE  
SERVER



Github

Gitlab

BitBucket

AWS

Code Commit

Work Together



git push



Thamil  
MAM

git pull



Why Git?

\* Free & Open Source

\* Super Fast

\* Scalable

\* Cheap Branching & Merging

# Configure Git

① Name

② Email

③ Default Editor

④ VI Colors

SYSTEM → All users

GLOBAL → All the repositories of current user

LOCAL

→ The current repository

Configuring Git



```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~  
$ git config --global user.name "Zartab Nakhwa"
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~  
$ git config --global user.email "zartab@codewithz.com"
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~  
$ git config --global core.editor "code"
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~  
$ git config --global color.ui auto
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~  
$ |
```



.gitconfig



Release Notes: 1.69.1

C: > Users > Zartab Nakhwa > .gitconfig

```
1 [user]  
2     name = Zartab Nakhwa  
3     email = zartab@codewithz.com  
4 [core]  
5     editor = code
```

## Checking all config

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~
$ git config -l
credential.helper=manager-core
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=Zartab Nakhwa
user.email=zartab@codewithz.com
core.editor=code
color.ui=auto
```

## Switch to Project Directory

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~
$ d:
bash: d:: command not found
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 ~
$ cd d:
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d
$ cd SCB/2022/Bootcamp\ July\ 2022/Git/myproject/
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproje
ct
$ |
```

## ① Initialize the Repository

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproje
ct
$ git init .
initialized empty Git repository in D:/SCB/2022/Bootcamp July 2022/Git/myproject
/.git/
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproje
ct (master)
$ ls -a
./ ../ .git/ index.html styles/
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproje
ct (master)
$ |
```

## ② Add Some/all files to Staging Area

```
nothing added to commit but untracked files present (use "git add" to track)
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add index.html

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
on branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   index.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    styles/
```

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
on branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   index.html
    new file:   styles/style.css

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
```

## ③ Commit The files to repository

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git commit -m "Initial Commit"
[master (root commit) b4b31aa] Initial Commit
 2 files changed, 21 insertions(+)
 create mode 100644 index.html
 create mode 100644 styles/style.css
```

To check commit history

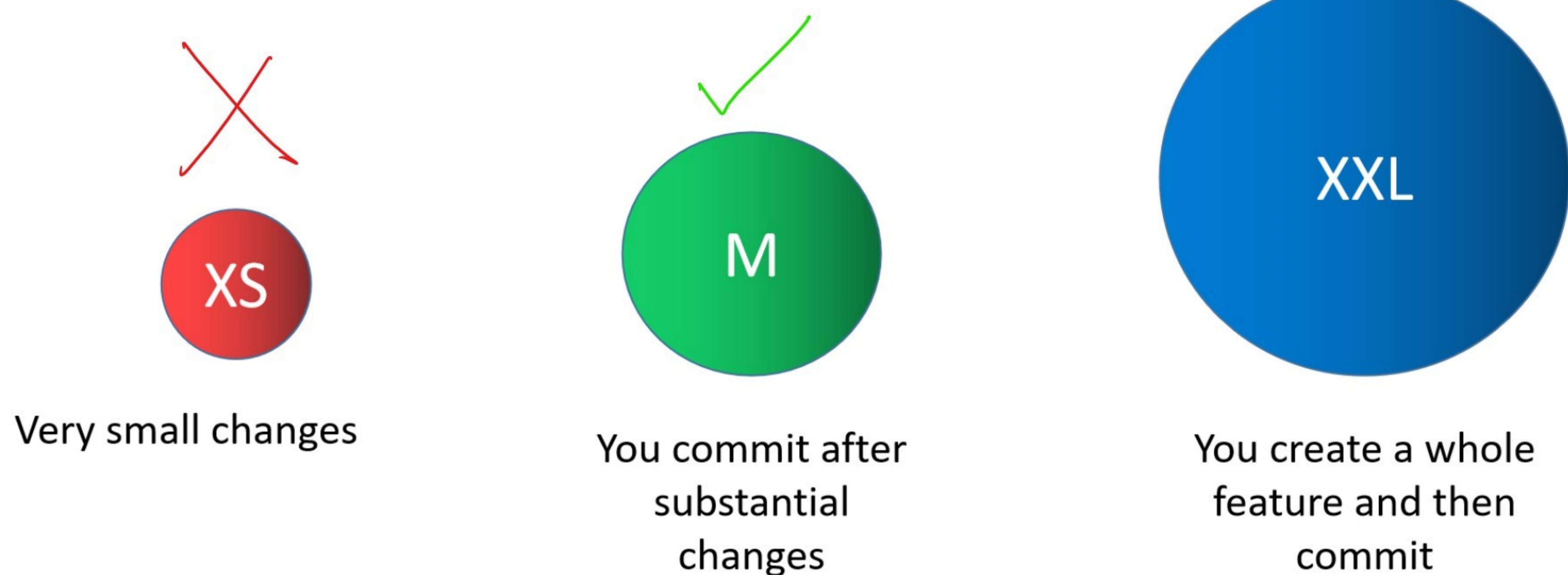
```
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log
commit b4b31aa25d2bfd7b2aeab4b1bab52cadf221259a (HEAD -> master)
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 11:45:13 2022 +0530

  Initial Commit
```

Give meaningful Commit messages

## Commit Best Practices

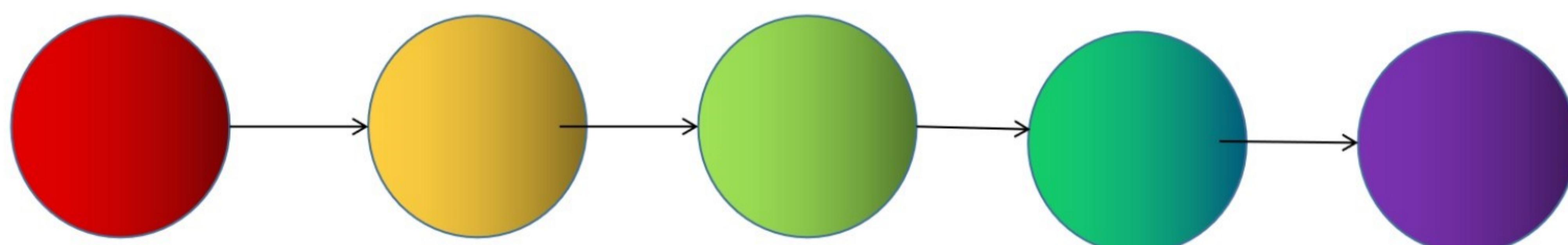
### Commit Size Matter



## Commit Best Practices

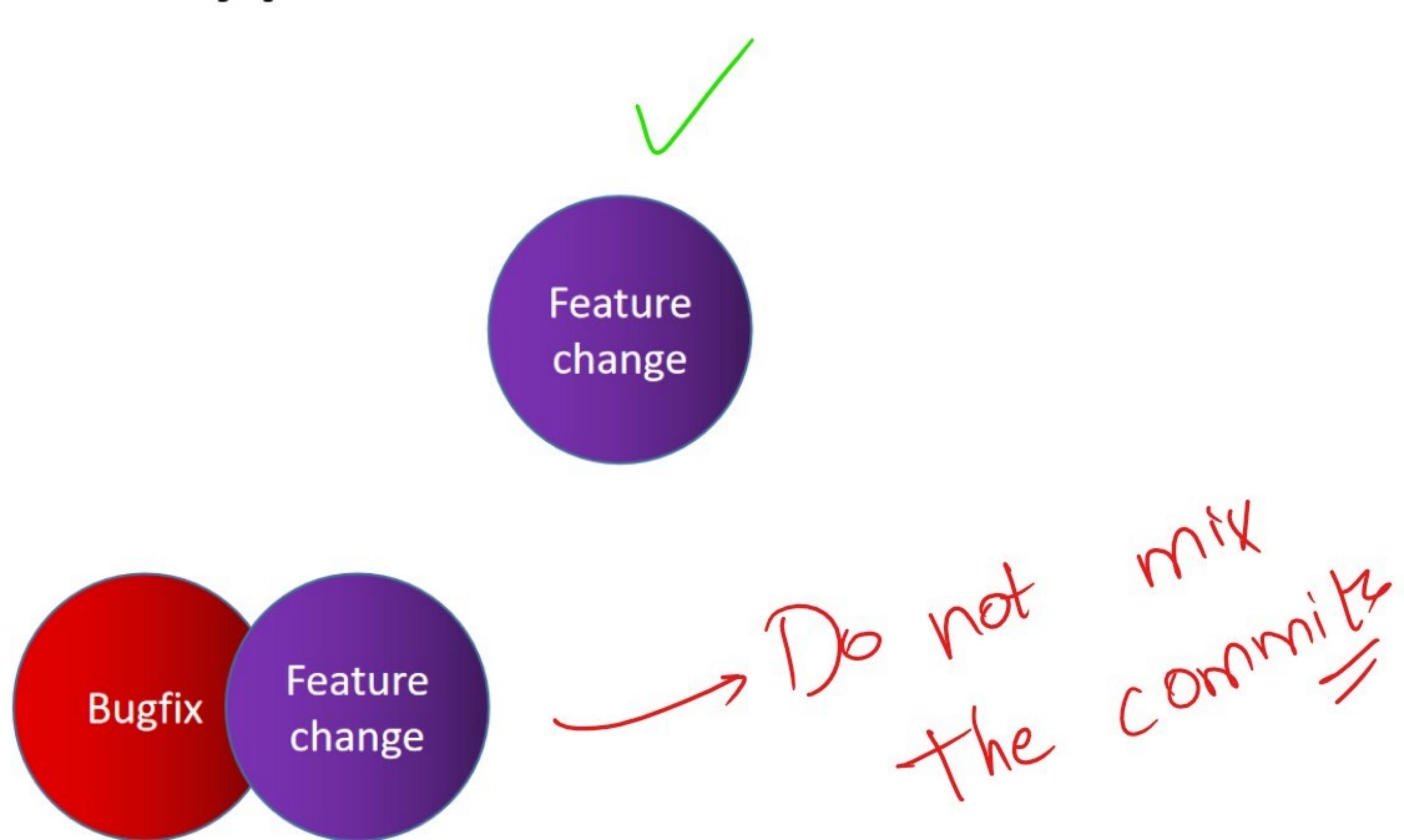
### Commit Often -

As you reach a state you want to RECORD then make a commit



## Commit Best Practices

### Don't mix different types of commit:



## Made changes in html & git status

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   index.html

no changes added to commit (use "git add" and/or "git commit -a")
```

## Add modified file to LA & commit

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git commit -m "updated the title in index.html"
[master 7d08c1b] Updated the title in index.html
 1 file changed, 1 insertion(+), 1 deletion(-)

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log
commit 7d08c1b309f6a3002a1363c1cb4818b284f35437 (HEAD -> master)
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 11:58:05 2022 +0530

  updated the title in index.html

commit b4b31aa25d2bfd7b2aeab4b1bab52cadf221259a
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 11:45:13 2022 +0530

Initial Commit

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
```

## Checking for files in Staging Area

```
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    profile.html

nothing added to commit but untracked files present (use "git add" to track)

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git ls-files
index.html
profile.html
styles/style.css

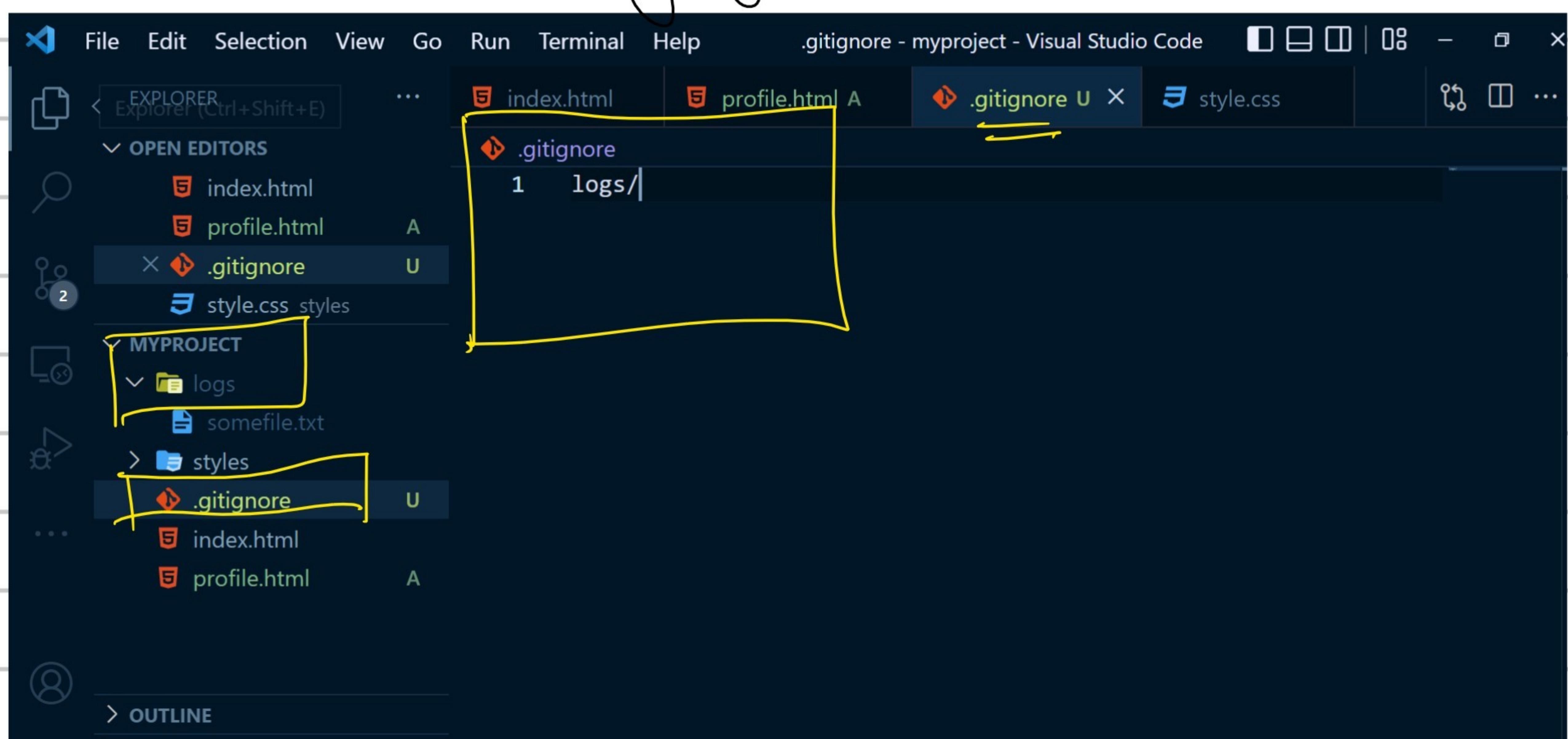
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

# Ignoring the files

In working directory

→ .gitignore

→ log  
→ compiled  
source code



```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file: profile.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .gitignore

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .gitignore

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git commit -m "Added .gitignore"
[master cd81f08] Added .gitignore
 2 files changed, 6 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 profile.html
```

## Status Short Hand

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status -s
M index.html
?? product.html
```

(M) - Modified  
(??) - Untracked  
Red → unstaged

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status -s
M index.html
A product.html
```

{M} - Modified  
(A) - Added  
Green → staged

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

## Viewing Difference in Working Directory & Staging Area

```
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git diff
diff --git a/index.html b/index.html
index 0980b44..065abdd 100644
--- a/index.html
+++ b/index.html
@@ -14,6 +14,7 @@
      </p>
      <h2>Description</h2>
      <p>Lorem ipsum dolor sit amet.</p>
+     <p>Lorem ipsum dolor sit amet.</p>
    </div>
  </body>
</html>
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

## Viewing difference in Staging Area & Repository

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git diff --staged
diff --git a/index.html b/index.html
index 94441dc..0980b44 100644
--- a/index.html
+++ b/index.html
@@ -13,6 +13,7 @@
      veritatis nulla quisquam maxime.
      </p>
      <h2>Description</h2>
+     <p>Lorem ipsum dolor sit amet.</p>
    </div>
  </body>
</html>
```

## Checking the history

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log
commit bc58150278de5f5b5ac05f0457d0b2104fe5e442 (HEAD -> master) → Commit id
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 12:15:42 2022 +0530

  Updated product and index → Commit message

commit cd81f08f4acb68108ec208c625903bbb9d6ef5e
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 12:09:26 2022 +0530

  Added .gitignore

commit 7d08c1b309f6a3002a1363c1cb4818b284f35437
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 11:58:05 2022 +0530

  updated the title in index.html

commit b4b31aa25d2bfd7b2aeab4b1bab52cadf221259a
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   Wed Jul 13 11:45:13 2022 +0530

Initial Commit
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --oneline
bc58150 (HEAD -> master) Updated product and index
cd81f08 Added .gitignore
7d08c1b Updated the title in index.html
b4b31aa Initial Commit
```

## Unstage a file

```
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   index.html

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   index.html

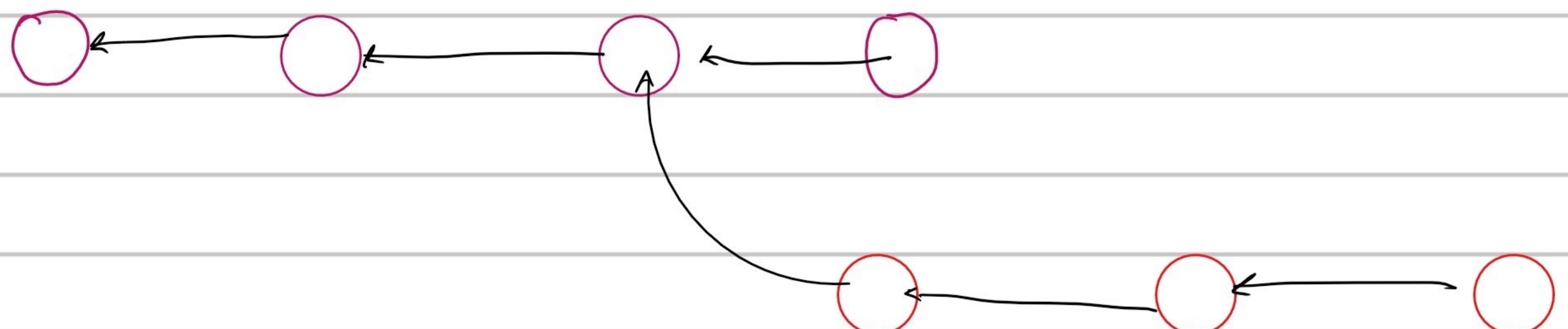
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git restore --staged index.html

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   index.html

no changes added to commit (use "git add" and/or "git commit -a")

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$
```

## Branching



allows us to diverge from the main line of work  
to work on something else

## Branching

master

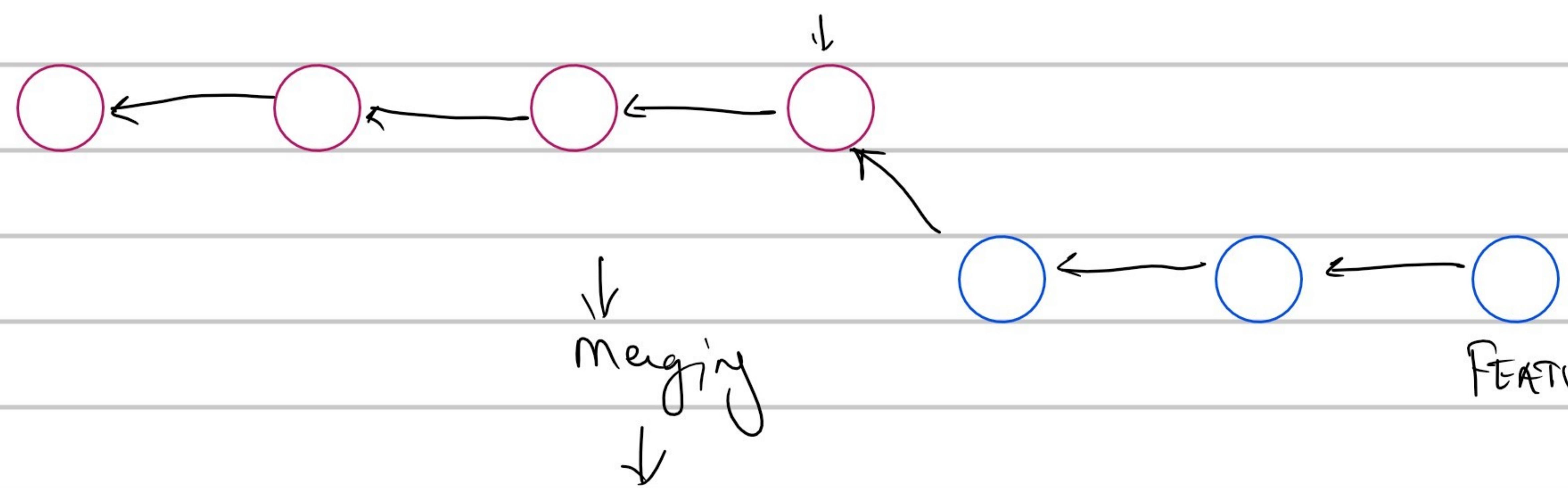
feature

+  
-  
+

Merging

master

MASTER



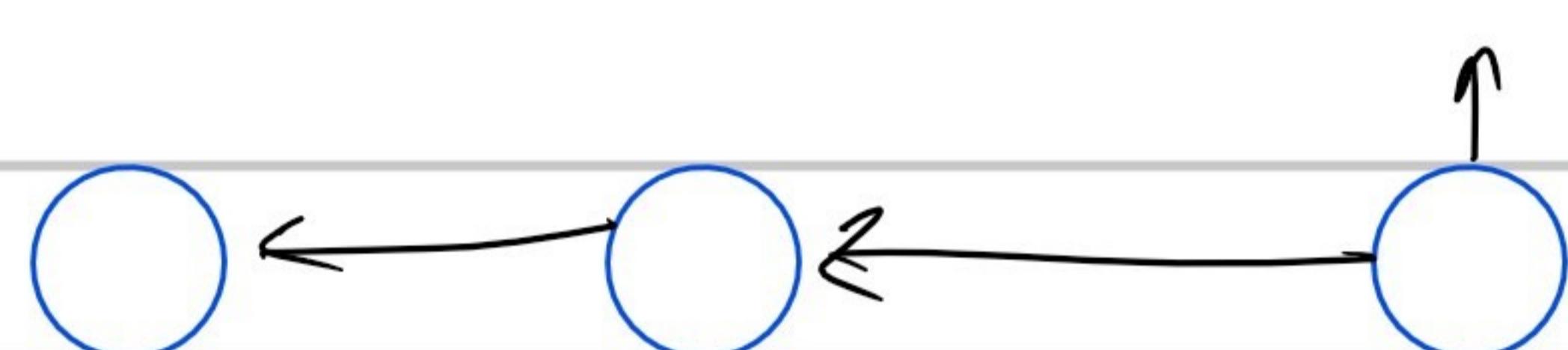
MASTER

fast forward  
merge

refs/heads/master

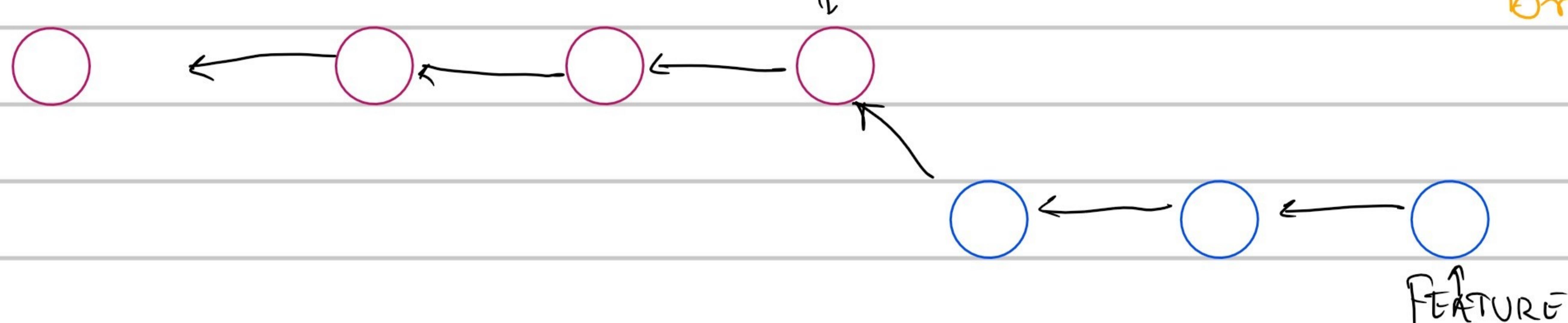
HEAD

MASTER



MASTER

a pointer which let  
you know what  
your current  
branch is



refs/heads/feature

## Creating a Branch

MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject

You're sharing this screen

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch feature-signup
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch
feature-signup
* master
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

(list The branches)

# Switching in the branches

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git checkout feature-signup
Switched to branch 'feature-signup'

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-signup)
$ |
```

git switch feature-signup

`git checkout` is a bit of a swiss army knife in that has several unrelated uses.

If you modify a file but haven't staged the change, then `git checkout <filename>` will reverse the modifications... a quick and easy way to cancel changes to a file. You remain in the same branch.

`git checkout <branchname>` (as you noted) switches branches.

Two completely different purposes, which could lead to confusion if a file name and a branch name are similar.

Having it as two commands is clearer.

Switched to new branch ; added a file; committed; checked log;  
switched back to master; checked log

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch feature-signup
Switched to branch 'feature-signup'
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-signup)
$ git add .
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-signup)
$ git commit -m "Added the signup form"
[feature-signup 0b094eb] Added the signup form
 1 file changed, 7 insertions(+)
 create mode 100644 signup.html
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-signup)
$ git switch master
Switched to branch 'master'
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git status
On branch master
nothing to commit, working tree clean
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --online
fatal: unrecognized argument: --online
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --oneline
6c34732 (HEAD -> master) Version 1
bc58150 Updated product and index
cd81f08 Added .gitignore
7d08c1b Updated the title in index.html
b4b31aa Initial Commit
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch feature-signup
Switched to branch 'feature-signup'
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-signup)
$ git log --oneline
0b094eb (HEAD -> feature-signup) Added the signup form
6c34732 (master) Version 1
bc58150 Updated product and index
cd81f08 Added .gitignore
7d08c1b Updated the title in index.html
b4b31aa Initial Commit
```

To check history of all the branches

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --all --oneline
0b094eb (feature-signup) Added the signup form
6c34732 (HEAD -> master) Version 1
bc58150 Updated product and index
cd81f08 Added .gitignore
7d08c1b Updated the title in index.html
b4b31aa Initial Commit
```

Compare the branches

```
You're sharing this screen
MINGW64:/d/SCB/2022/Bootcamp July 2022/Git/myproject
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log master..feature-signup
commit 0b094eb9289ee7923a8f03eabe6175f69154888f (feature-signup)
Author: Zartab Nakhwa <zartab@codewithz.com>
Date:   wed Jul 13 12:52:46 2022 +0530

    Added the signup form

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git diff master..feature-signup
diff --git a/signup.html b/signup.html
new file mode 100644
index 0000000..30dc094
--- /dev/null
+++ b/signup.html
@@ -0,0 +1,7 @@
+<html>
+  <body>
+    <form action="">
+      <label for="">sign up</label>
+    </form>
+  </body>
+</html>
```

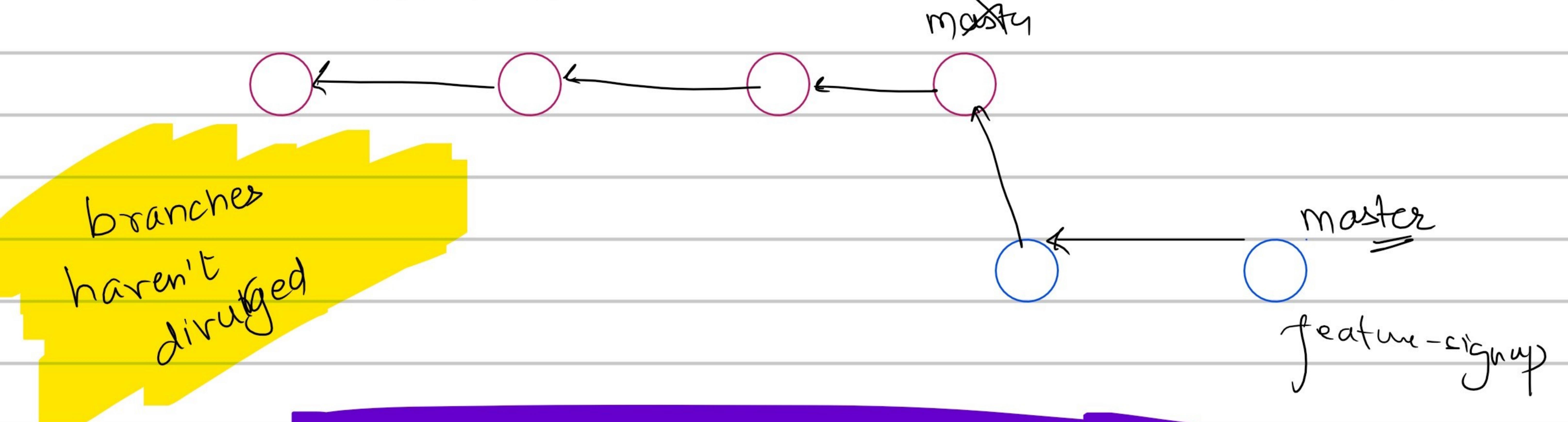
Merging

① Fast Forward Merge

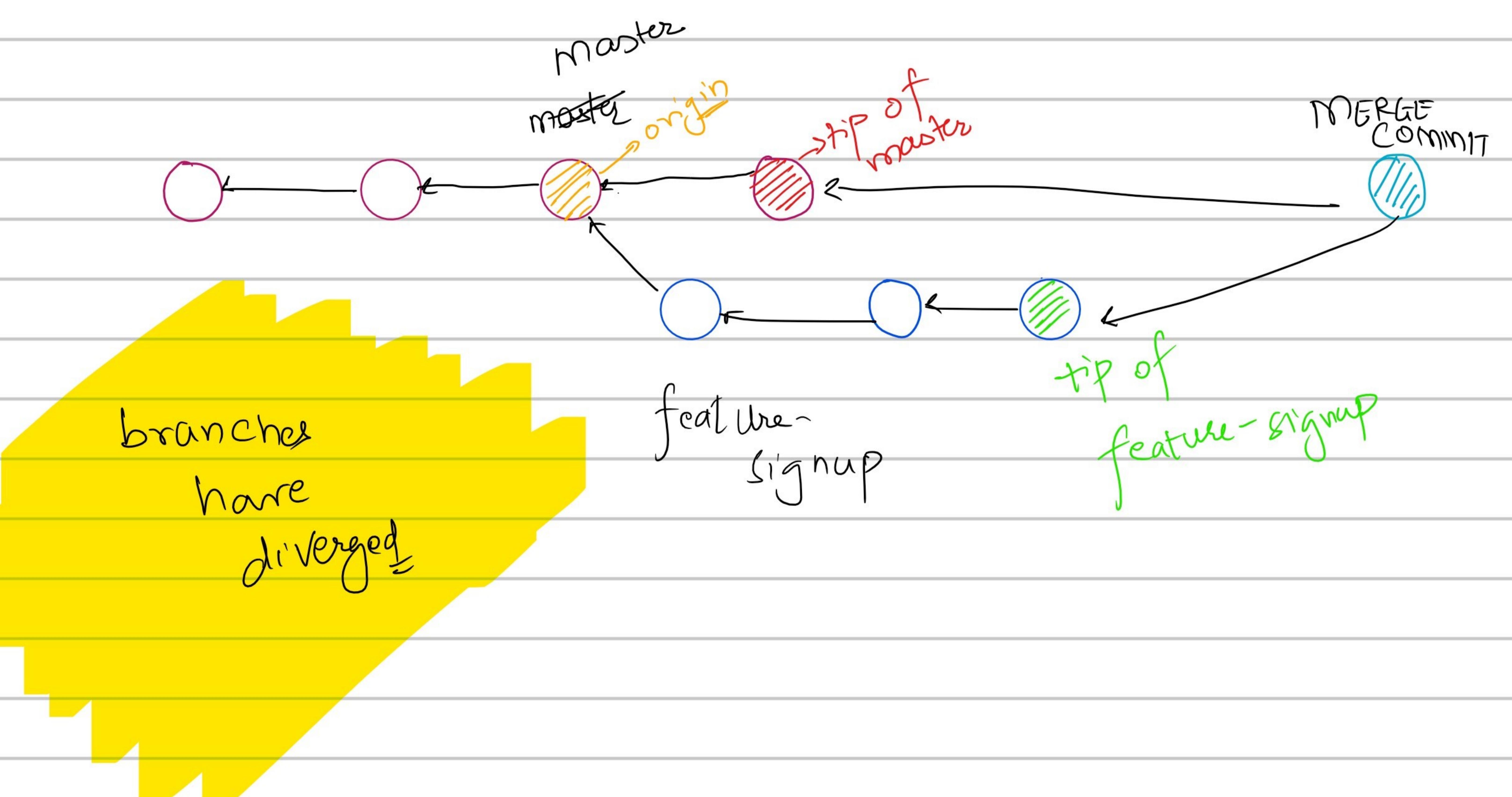
② 3-way Merge

Fast Forward Merge

## Fast Forward Merge



## 3-Way Merge



## Merge

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --all --oneline --graph
* 0b094eb (feature-signup) Added the signup form
* 6c34732 (HEAD -> master) version 1
* bc58150 Updated product and index
* cd81f08 Added .gitignore
* 7d08c1b Updated the title in index.html
* b4b31aa Initial commit

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch master
Already on 'master'

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git merge feature-signup
Updating 6c34732..0b094eb
Fast-forward
  signup.html | 7 ++++++
  1 file changed, 7 insertions(+)
  create mode 100644 signup.html
```

## After Merge

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --all --oneline --graph
* 0b094eb (HEAD -> master, feature-signup) Added the signup form
* 6c34732 Version 1
* bc58150 Updated product and index
* cd81f08 Added .gitignore
* 7d08c1b Updated the title in index.html
* b4b31aa Initial Commit
```

Once merge is done; branch should be deleted

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch -d feature-signup
Deleted branch feature-signup (was 0b094eb).

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

## Merging with --no-ff

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch feature-login

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch feature-login
Switched to branch 'feature-login'

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-login)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-login)
$ git commit -m "Login Page Added"
[feature-login 122dc61] Login Page Added
 1 file changed, 5 insertions(+)
 create mode 100644 login.html

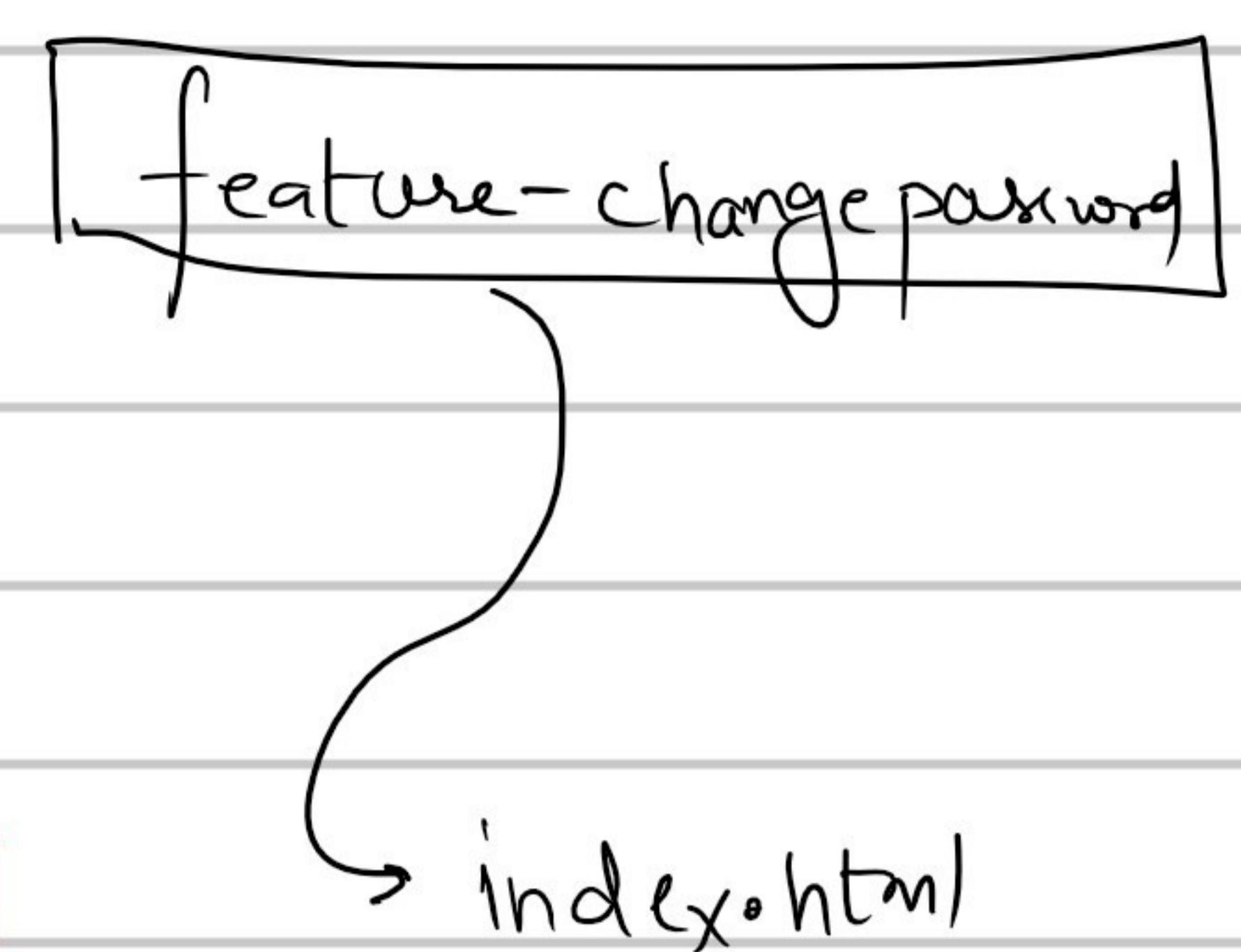
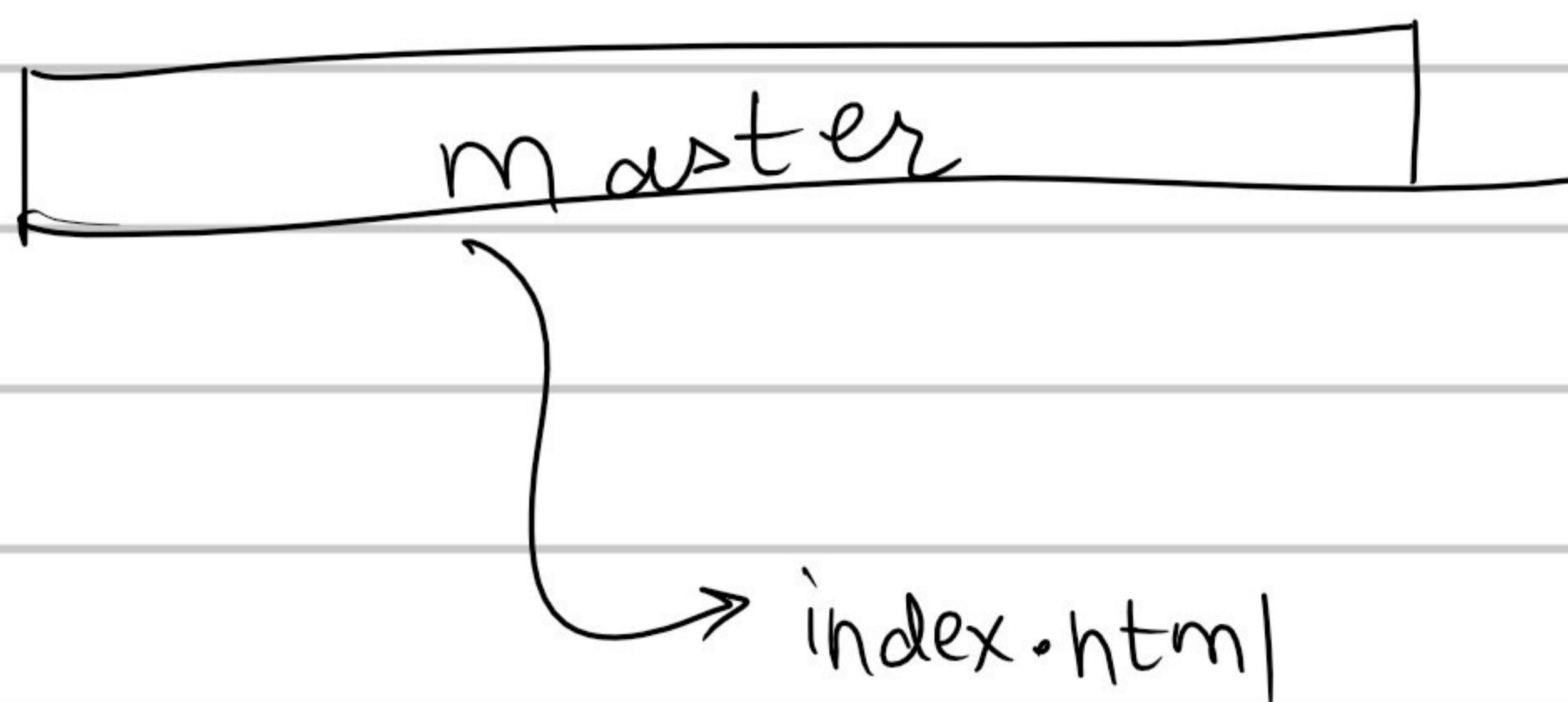
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-login)
$ git switch master
Switched to branch 'master'
```

```
* 122dc61 (feature-login) Login Page Added
* 0b094eb (HEAD -> master) Added the signup form
* 6c34732 Version 1
* bc58150 Updated product and index
* cd81f08 Added .gitignore
* 7d08c1b Updated the title in index.html
* b4b31aa Initial Commit
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git merge --no-ff feature-login
Merge made by the 'ort' strategy.
 login.html | 5 +++++
 1 file changed, 5 insertions(+)
 create mode 100644 login.html
```

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --oneline --all --graph
* 3d2d3fe (HEAD -> master) Merge branch 'feature-login'
| \
| * 122dc61 (feature-login) Login Page Added
* 0b094eb Added the signup form
| |
| * 6c34732 Version 1
| |
| * bc58150 Updated product and index
| |
| * cd81f08 Added .gitignore
| |
| * 7d08c1b Updated the title in index.html
| |
| * b4b31aa Initial Commit
```

# Merge Conflict



both branches  
make changes to  
index.html

index.html  
feature  
CP  
Committed

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch feature-change-password

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch feature-change-password
Switched to branch 'feature-change-password'

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-ch
ange-password)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-ch
ange-password)
$ git commit -m "Changed title for CP"
[feature-change-password e06f327] changed title for CP
 1 file changed, 1 insertion(+), 1 deletion(-)

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-ch
```

index.html  
master  
Committed

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git commit -m "Changed Title for Master Page"
[master bc6296b] Changed Title for Master Page
 1 file changed, 1 insertion(+), 1 deletion(-)

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ |
```

When trying to merge

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git merge feature-change-password
Auto-merging index.html
CONFLICT (content): Merge conflict in index.html
Automatic merge failed; fix conflicts and then commit the result.

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master|MER
GING)
$ |
```

The file which has merge conflict looks like

```
signup.html login.html index.html ! X
index.html > html > body > div > ?
1 <html>
2   <head>
3     <title>Welcome to SCB</title>
4     <link rel="stylesheet" href="styles/style.css" />
5   </head>
6   <body>
7     <div>
8       <h1>Standard Chartered Bank - Master Page</h1>
9       =====
10      <h1>Standard Chartered Bank - Change Password</h1>
11      >>>>> feature-change-password (Incoming Change)
12      <p>
13        Lorem ipsum dolor, sit amet consectetur adipisicing elit
14        vero provident velit porro. Sint maiores facere, sequi n
15        nesciunt inventore cumque necessitatibus provident, cons
16        veritatis nulla quisquam maxime.
17      </p>
18
```

Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Change

Evil Commit

Once file is fixed

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master|MERGING)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master|MERGING)
$ git commit -m "Heading Issue Merged"
[master e6a27e0] Heading Issue Merged

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
```

3-way-merge

```
Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git branch -c feature-upload

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git switch feature-upload
Switched to branch 'feature-upload'

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-upload)
$ # we added a new file by name of upload.html

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-upload)
$ git add .

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-upload)
$ git commit -m "Added upload.html"
[feature-upload 5815b5e] Added upload.html
 1 file changed, 6 insertions(+)
 create mode 100644 upload.html

Zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-upload)
```

```

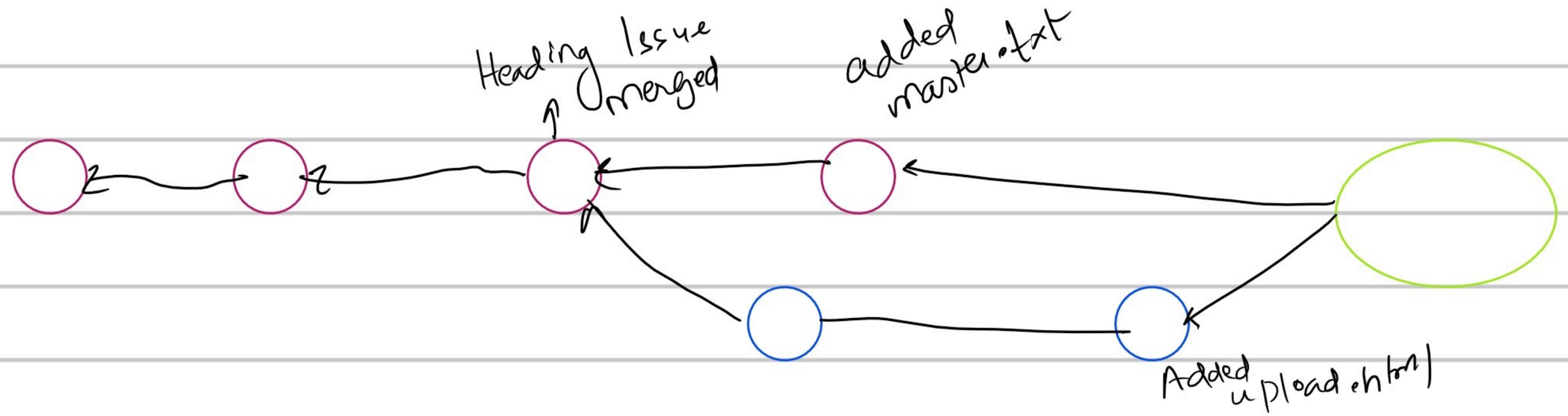
zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (feature-upload)
$ git switch master
Switched to branch 'master'

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git add .

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git commit -m "Added master.txt"
[master 05e5b86] Added master.txt
 1 file changed, 1 insertion(+)
 create mode 100644 master-data.txt

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --oneline --all --graph
* 05e5b86 (HEAD -> master) Added master.txt
| * 5815b5e (feature-upload) Added upload.html
|/
* e6a27e0 Heading Issue Merged

```



```

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git merge feature-upload
Merge made by the 'ort' strategy.
 upload.html | 6 ++++++
 1 file changed, 6 insertions(+)
 create mode 100644 upload.html

zartab Nakhwa@WINDOWS-L1BB9SS MINGW64 /d/SCB/2022/Bootcamp July 2022/Git/myproject (master)
$ git log --oneline --all --graph
* 3f25cdb (HEAD -> master) Merge branch 'feature-upload'
|\ 
* 5815b5e (feature-upload) Added upload.html
* | 05e5b86 Added master.txt
|/
* e6a27e0 Heading Issue Merged
|\ 
* e06f327 Changed title for CP
* | bc6296b Changed Title for Master Page
* | 3d2d3fe Merge branch 'feature-login'
|\ 
* | 122dc61 Login Page Added

```

Stashing





































