



Introduction to Frontend Web Development

Pertemuan #2

Kamis, 25 Februari 2021

Andre Rusli

Silabus (1)

HTML, CSS, JS (#1)

- Perkenalan
- Alur materi dan target capaian
- Konsep dasar pengembangan aplikasi web

Frontend Development (#2-3)

- Apa, mengapa, bagaimana
- VueJS & Buefy

Silabus (2)

Backend Development & Integration (#4-5)

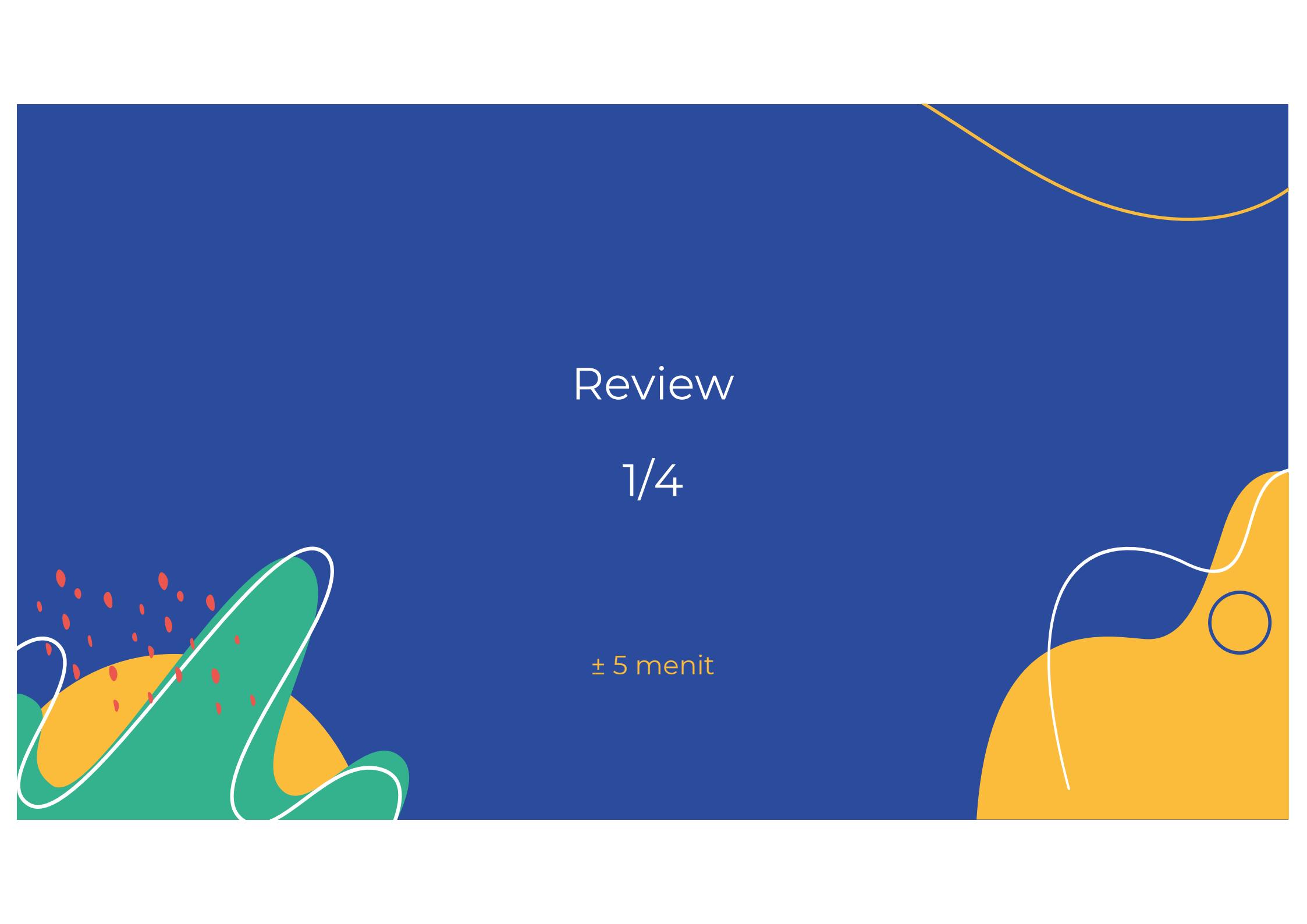
- Apa, mengapa, bagaimana
- Konsep dasar API (Application Programming Interface)
- Google Firebase
- Menghubungkan frontend dan backend dalam membangun aplikasi web

Wrap Up (#6)

- Review
- What's next
- Penutup

Hari Ini

- Review ± 5 menit
- Instalasi dan pengenalan tools (Git, GitHub, VSCode) ± 15 menit
- Coding Tutorial: HTML, CSS, JS ± 30 menit
- Frontend Template & Framework ± 30 menit

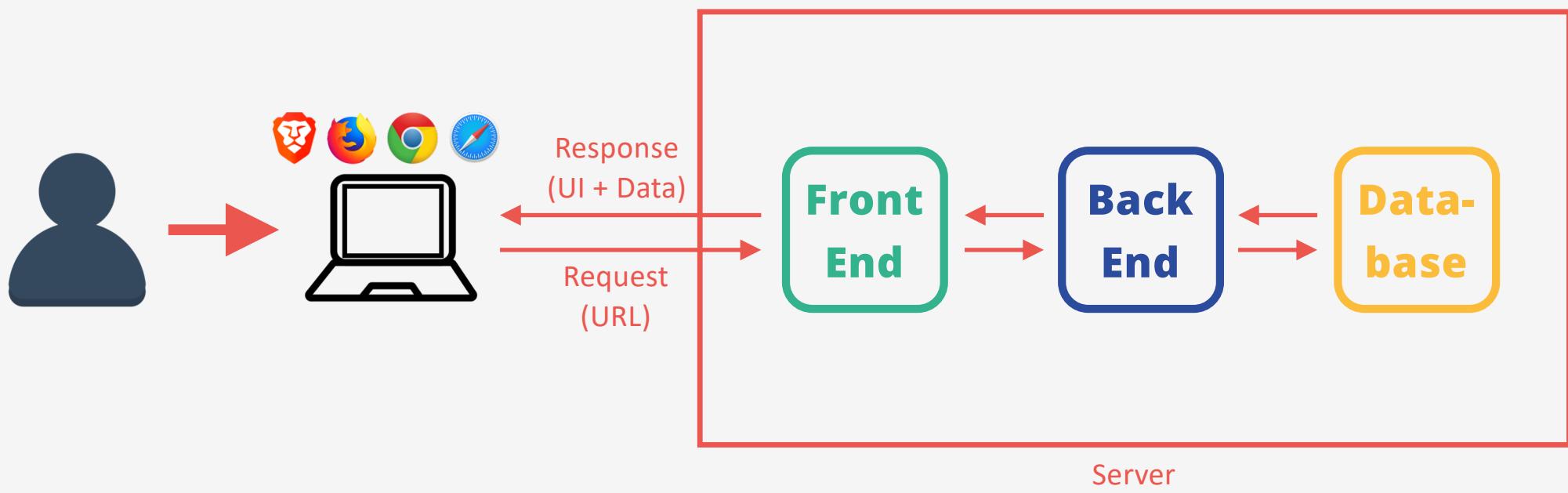


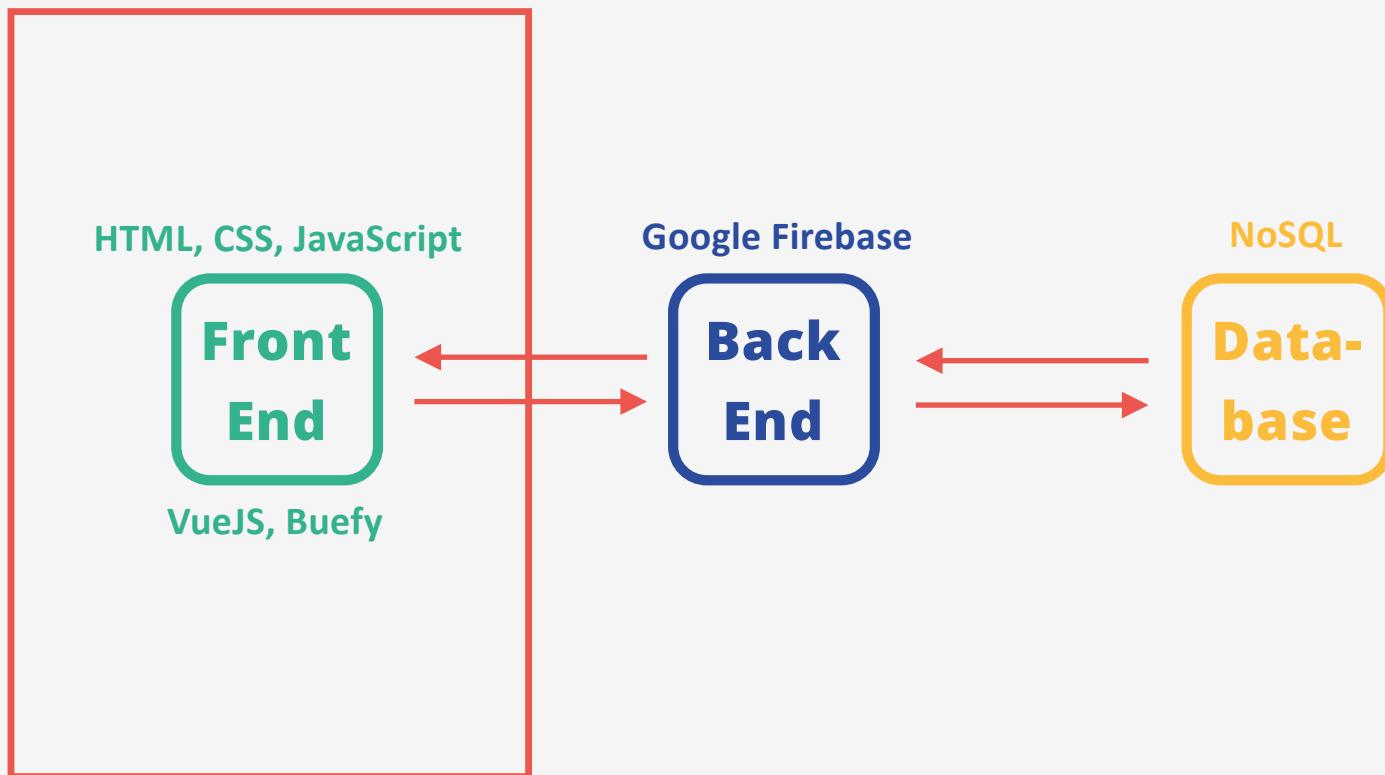
Review

1/4

± 5 menit

Web Application: **How it Works**







Ada yang sudah punya GitHub Page-nya sendiri?

Contoh: <https://arusl.github.io>

Instalasi dan Pengenalan Tools

2/4

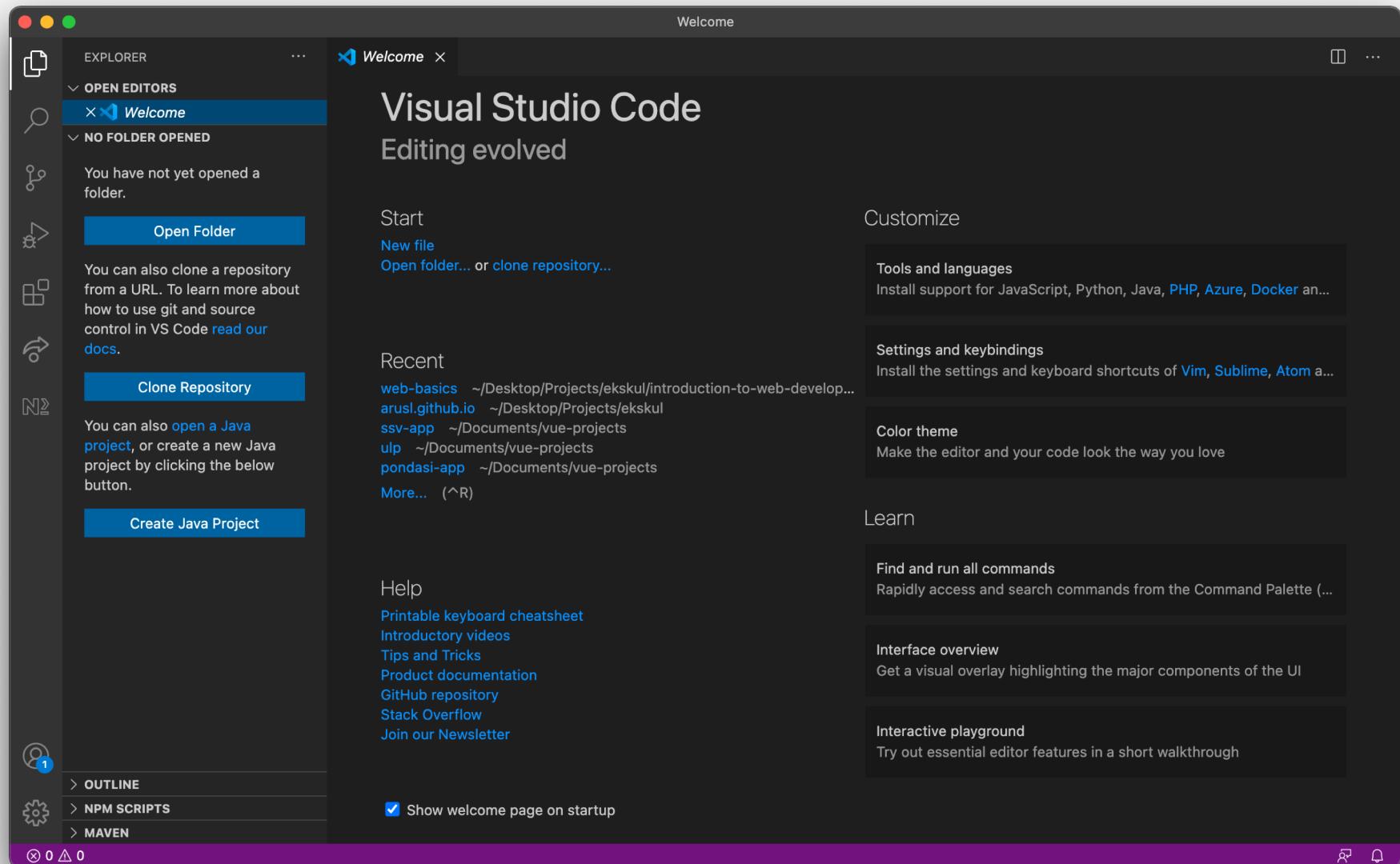
± 15 menit

Visual Studio Code

Salah satu Text Editor yang umum digunakan untuk coding.

Download dan install VSCode:

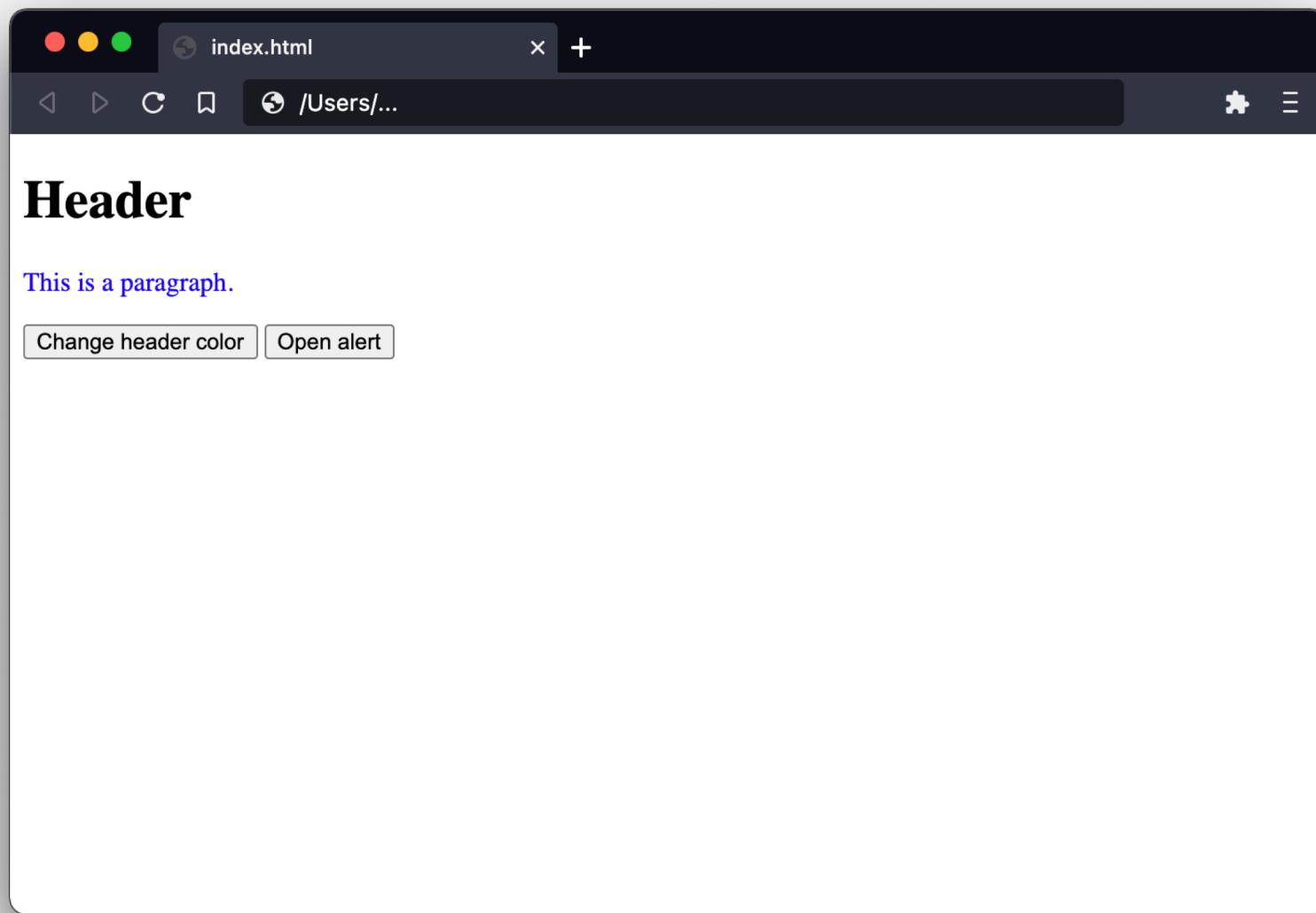
- <https://code.visualstudio.com>



Browser: Google Chrome/Brave

Download dan install salah satu browser di bawah ini:

- <https://brave.com/download/>
- <https://www.google.com/chrome/>



Git and GitHub Repository

Download dan install git pada komputer:

- <https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>

Buat akun pada website GitHub:

- <https://github.com>

Software development platform yang dapat digunakan untuk sharing source code, version management, dan kolaborasi antar programmer.

```
Last login: Wed Feb 24 11:16:14 on ttys000
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
(base) andreRs-MacBook-Pro:~ andrer$ git --version
git version 2.24.3 (Apple Git-128)
(base) andreRs-MacBook-Pro:~ andrer$
```

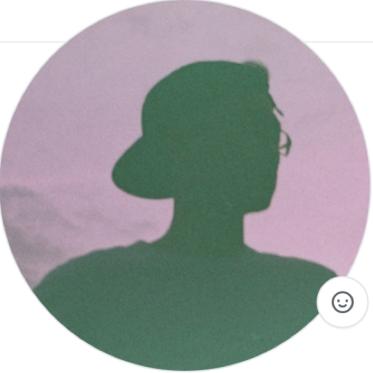
Start -> Command Prompt / CMD

arosl (Andre) x +

github.com/arosl

Search or jump to... / Pull requests Issues Marketplace Explore

Overview Repositories 16 Projects Packages



Andre
arosl

Javascript for Web and Mobile App Development. Python for Machine Learning and Natural Language Processing.

Edit profile

17 followers · 5 following · 2

Tokyo, Japan

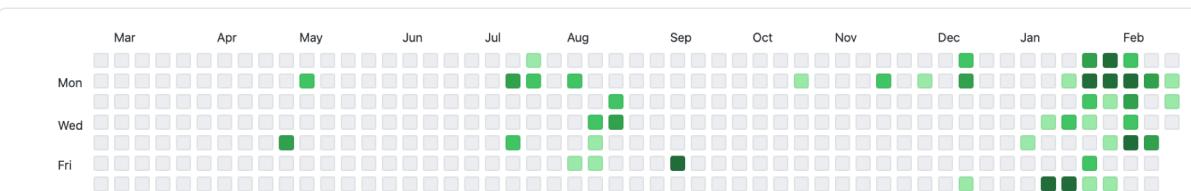
Popular repositories

- introduction-to-web-development**
CSS 2 stars
- arosl.github.io**
CSS
- ulp**
A web app for assisting asset management in universities.
Vue

Customize your pins

121 contributions in the last year

Contribution settings ▾



Learn how we count contributions.

Less Tip More

Contribution activity

2021

Coding Tutorial: HTML, CSS, JS

3/4

± 30 menit

Download dan Buka Contoh Kode

- Buka GitHub kelas Ekskul ini
 - <https://github.com/arusl/introduction-to-web-development>
- Git clone / download isi repositori
- Buka salah satu folder pada VS Code

arusr/introduction-to-web-devel

github.com/arusr/introduction-to-web-development

Search or jump to... / Pull requests Issues Marketplace Explore

arusr / introduction-to-web-development

Code Issues 1 Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags

Go to file Add file Code

Clone HTTPS SSH GitHub CLI
https://github.com/arusr/introduction-to-web-development

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

About

No description, website, or topics provided.

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

Languages

CSS 57.8% HTML 27.8% JavaScript 14.4%

arusr edited Target Capaian

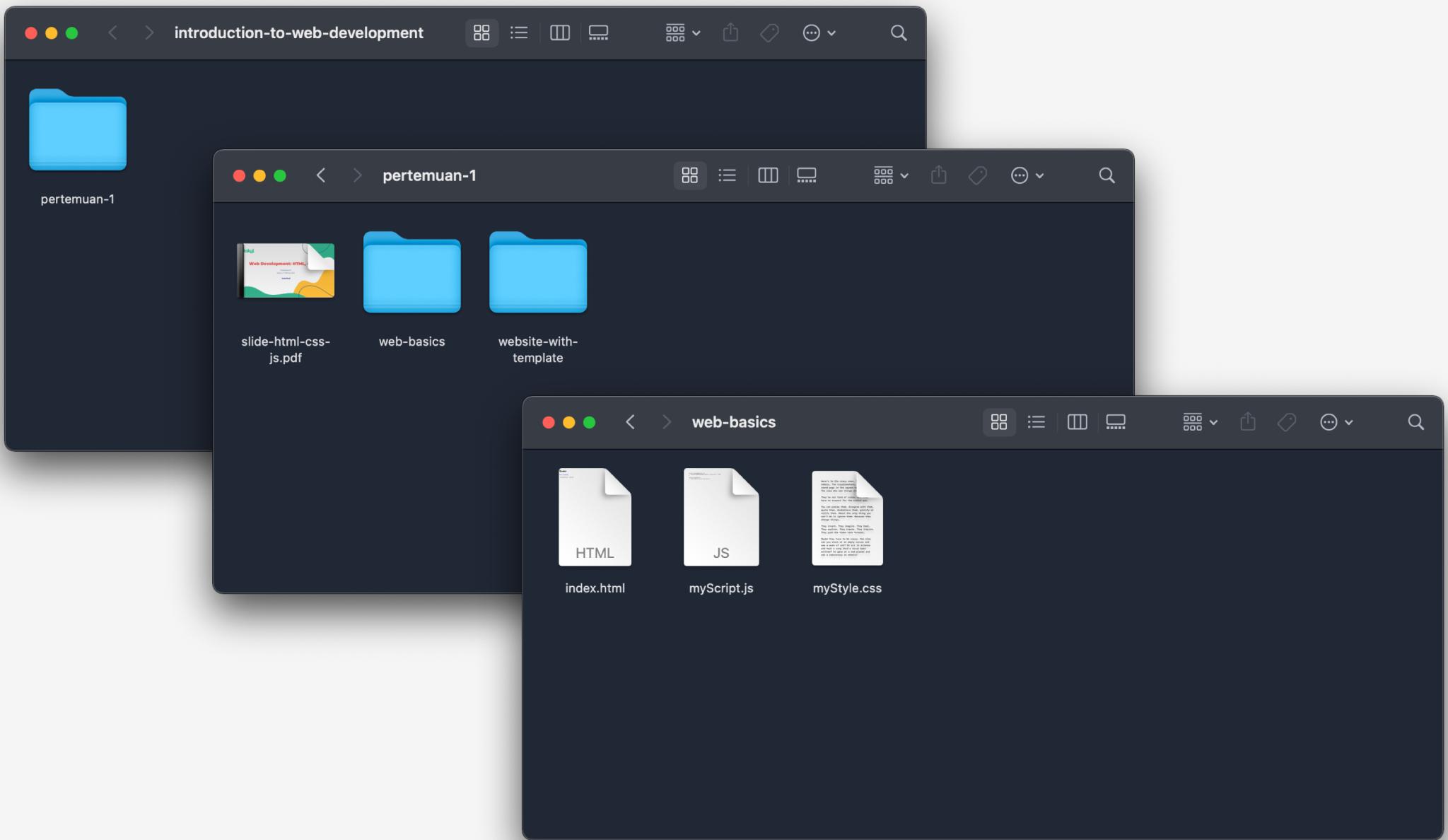
pertemuan-1 edited Target Capaian

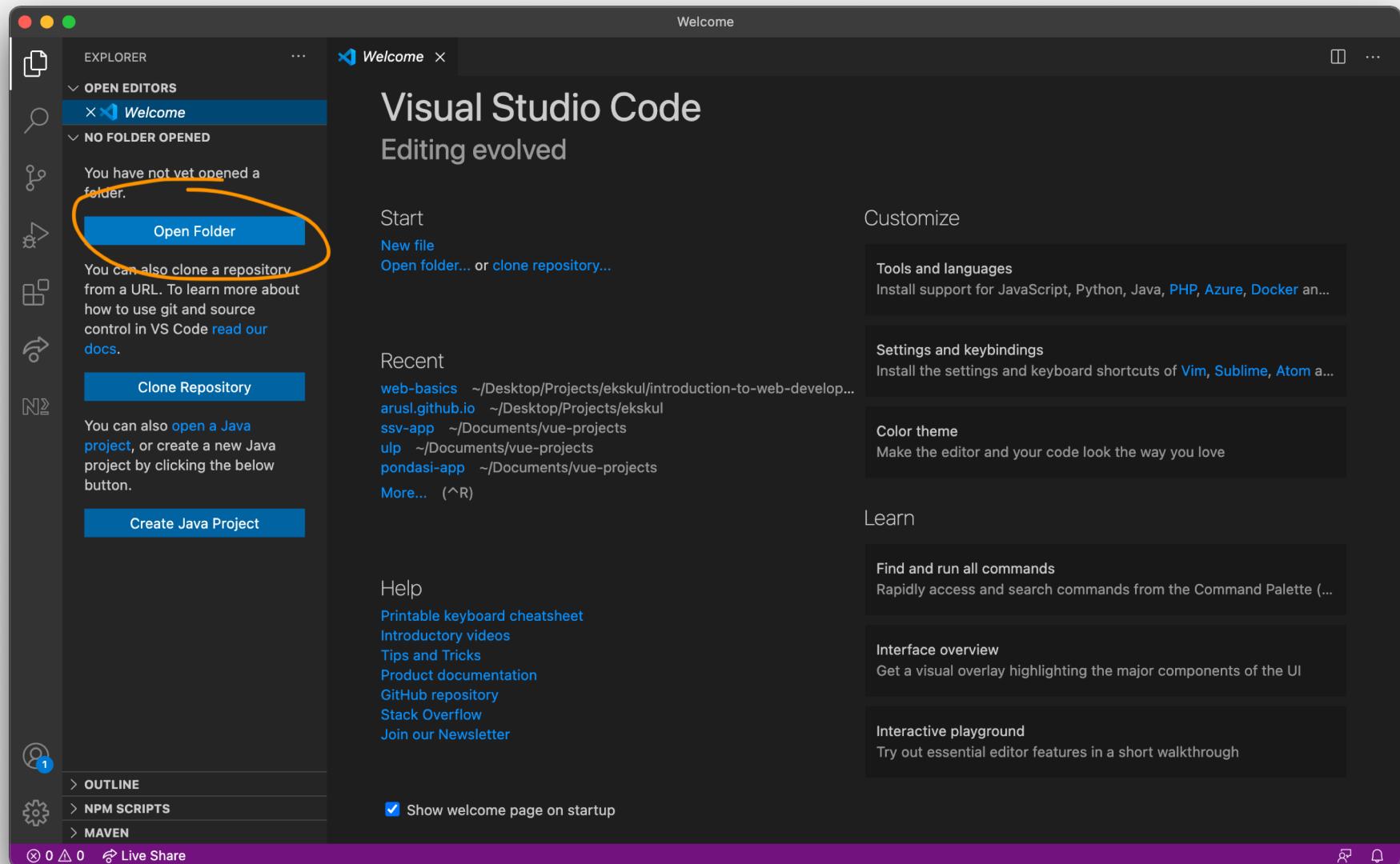
.gitignore added website-with-template

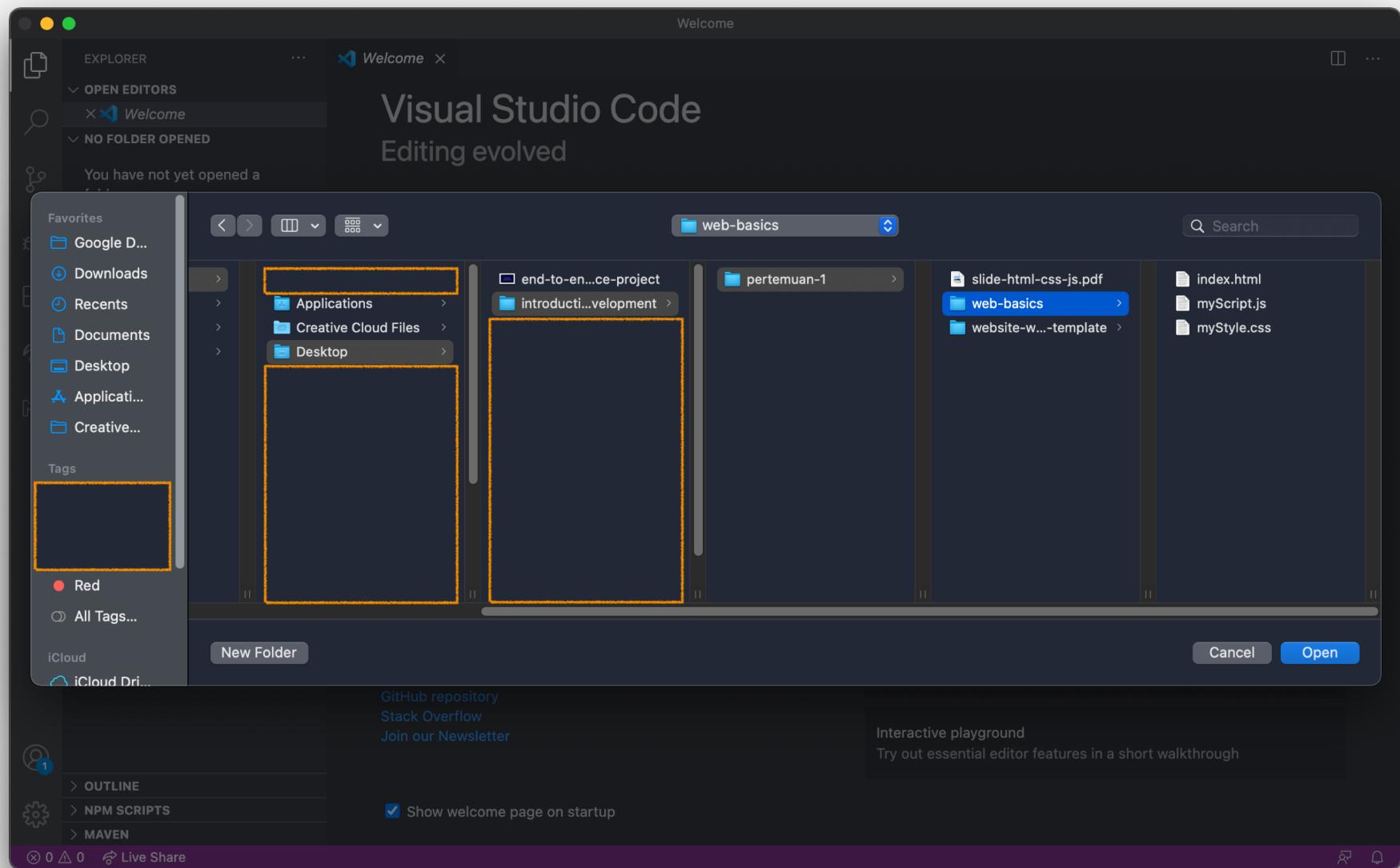
Help people interested in this repository understand your project by adding a README.md

```
Last login: Wed Feb 24 11:19:52 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
[(base) andreRs-MacBook-Pro:~ andrer$ cd Desktop/]
[(base) andreRs-MacBook-Pro:Desktop andrer$ git clone https://github.com/arusl/introduction-to-web-development.git]
Cloning into 'introduction-to-web-development'...
remote: Enumerating objects: 128, done.
remote: Counting objects: 100% (128/128), done.
remote: Compressing objects: 100% (104/104), done.
remote: Total 128 (delta 19), reused 117 (delta 15), pack-reused 0
Receiving objects: 100% (128/128), 5.86 MiB | 4.14 MiB/s, done.
Resolving deltas: 100% (19/19), done.
(base) andreRs-MacBook-Pro:Desktop andrer$
```







index.html — web-basics

The screenshot shows the VS Code interface with the following details:

- EXPLORER** sidebar:
 - OPEN EDITORS**: index.html
 - WEB-BASICS**: index.html (selected), myScript.js, myStyle.css
- Editor Area**:
 - File: index.html
 - Content:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <link rel="stylesheet" href="myStyle.css">
5      <script src="myScript.js"></script>
6  </head>
7  <body>
8      <h1 id="header1">Header</h1>
9      <p class="ubah-warna">This is a paragraph.</p>
10     <button onclick="changeHeaderColor()">Change header color</button>
11     <button onclick="openAlert()">Open alert</button>
12  </body>
```
 - A preview panel on the right shows the rendered HTML with a blue header and a blue paragraph.
- Bottom Status Bar**: master*, 0 △ 0, Live Share, Ln 12, Col 8, Spaces: 4, UTF-8, LF, HTML, Prettier, ⚙, 📡

Learning resources on the basics of HTML, CSS, and JS

- Google
- <https://www.w3schools.com/html/default.asp>
- <https://www.w3schools.com/css/default.asp>
- <https://www.w3schools.com/js/default.asp>

Coba-coba

Dengan menggunakan HTML element di bawah ini (boleh pakai yang lain juga):

- <div>
- <p>
-
- <table>, <tr>, <td>

Ditambah **CSS style attribute** seperlunya, buatlah sebuah halaman website seperti yang dapat dilihat pada halaman berikut.

Selamat Datang di Website Ini

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.



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Bacaan Tambahan

When should you NOT use HTML tables?

HTML tables should be used for tabular data — this is what they are designed for. Unfortunately, a lot of people used to use HTML tables to lay out web pages, e.g. one row to contain the header, one row to contain the content columns, one row to contain the footer, etc. You can find more details and an example at [Page Layouts](#) in our [Accessibility Learning Module](#). This was commonly used because CSS support across browsers used to be terrible; table layouts are much less common nowadays, but you might still see them in some corners of the web.

In short, using tables for layout rather than CSS layout techniques is a bad idea. The main reasons are as follows:

1. **Layout tables reduce accessibility for visually impaired users:** [Screenreaders](#), used by blind people, interpret the tags that exist in an HTML page and read out the contents to the user. Because tables are not the right tool for layout, and the markup is more complex than with CSS layout techniques, the screenreaders' output will be confusing to their users.
2. **Tables produce tag soup:** As mentioned above, table layouts generally involve more complex markup structures than proper layout techniques. This can result in the code being harder to write, maintain, and debug.
3. **Tables are not automatically responsive:** When you use proper layout containers (such as `<header>`, `<section>`, `<article>`, or `<div>`), their width defaults to 100% of their parent element. Tables on the other hand are sized according to their content by default, so extra measures are needed to get table layout styling to effectively work across a variety of devices.

Sumber:

<https://developer.mozilla.org/en-US/docs/Learn/HTML/Tables/Basics>

Disarankan menggunakan teknik layout CSS seperti contohnya:

https://www.w3schools.com/howto/howto_css_two_columns.asp

GitHub Pages

Host website anda pada GitHub Page dengan mengikuti instruksi yang tertera pada website di bawah ini:

- <https://pages.github.com/>

Frontend Template & Framework

4/4

± 30 menit

Library, Framework, Template

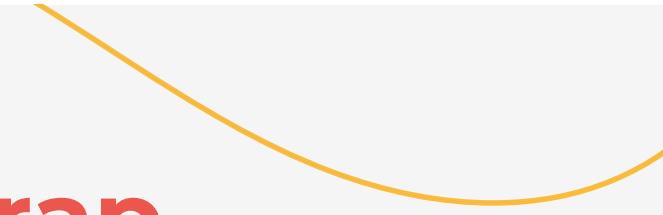
Analogi: Develop Website dan Bangun Rumah

“Template” itu seperti kita beli rumah yang sudah jadi, lalu kita bisa renovasi sesuai kebutuhan kita.

“Framework” itu seperti kita saat bangun rumah, tapi *blueprint*-nya sudah dibuatkan dan tools yang dibutuhkan sudah disediakan, sehingga ada panduan dan aturan2 saat membangun rumah sesuai dengan *blueprint* dan *tools* yang tersedia.

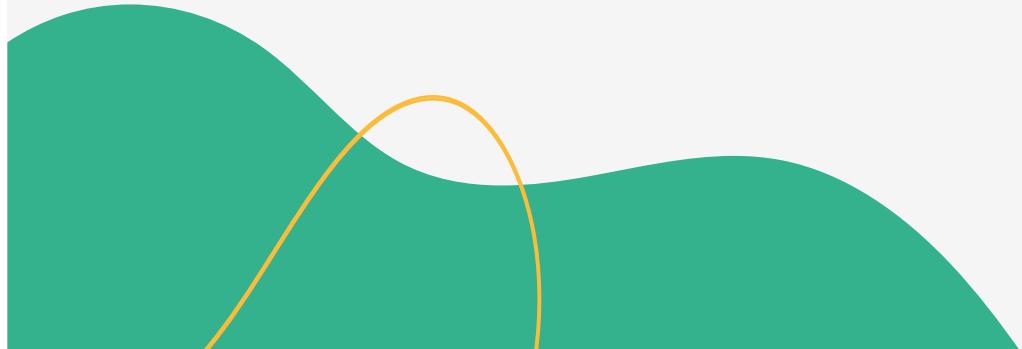
“Library” itu seperti saat kita bangun rumahnya sendiri, namun kita tidak ingin buat meja dan kursinya sendiri, sehingga walaupun rumahnya kita yang bangun, tapi furniturnya kita beli dari yang menyediakan.

Popular Frontend Toolkit: **Bootstrap**



Cara penggunaan dan tutorial lengkap dapat dilihat pada:
<https://getbootstrap.com/>

Demo.



Bootstrap Templates

- Tergantung kebutuhannya, kadang website yang kita buat tidak perlu kita rancang dari nol
- Salah satu cara yang umum digunakan adalah dengan memulai projek website dari sebuah template

Demo.

Menggunakan template dari

<https://bootstrapmade.com/eno-free-simple-bootstrap-template/>

Pertemuan Berikutnya

Frontend Frameworks: VueJS & Buefy



Thank You!

Bootstrap Templates:

- <https://themes.getbootstrap.com/>
- <https://bootstrapmade.com/>

VueJS Online Course:

- <https://www.udemy.com/course/vuejs-2-the-complete-guide/learn/lecture/21526376?start=0#overview>