Lecture 3:

Learn to Write Software Documentation Using Markdown in GitHub Wiki

DR.ASHWAG O MAGRAHBY

1ST 2023/2024

Software Documentation

Software documentation is **written text** that accompanies computer software .

It is an integral **part of the overall user experience** with the software product.

Technical Writers in Software Development World

For the **customers**:

- Helping users to effectively set up and use software
- Assisting the users in solving a problem by themselves
- Making customers happy when using the software thus increasing the usage of the software and the perceived quality of software products

For the **software development team**:

- Saving time and energy of the development team
- Establishes common rules and best practices for addressing the user (what and how to write, which user interface texts to use, which style to use, etc.)

Technical Writing Deliverables in Software Development World

Technical writer's deliverable can take the form of:

- A user guide
- API documentation
- A helpful instruction, displayed on the screen of the software
- An instructional video or image, voice instruction or other type of multimedia – anything that assist the user into finding his or her way through the software
- Metadata, provided to a machine for search and retrieval of the information

What is GitHub?

GitHub https://github.com/

GitHub, is a platform and cloud-based service for software development and version control using Git, allowing developers to store and manage their code.

it is a web hub, that uses Git.

In software engineering, **version control** is a class of systems responsible for managing changes to computer programs, documents, large web sites, or other collections of information. Version control is a component of software configuration management.

Database source control system

What is GitHub?

GitHub https://github.com/

GitHub, is a platform and cloud-based service for software development and version control using Git, allowing developers to store and manage their code.

Git is a distributed version control system that tracks changes in any set of computer files, usually used for coordinating work among programmers collaboratively developing source code during software development.

What is GitHub?

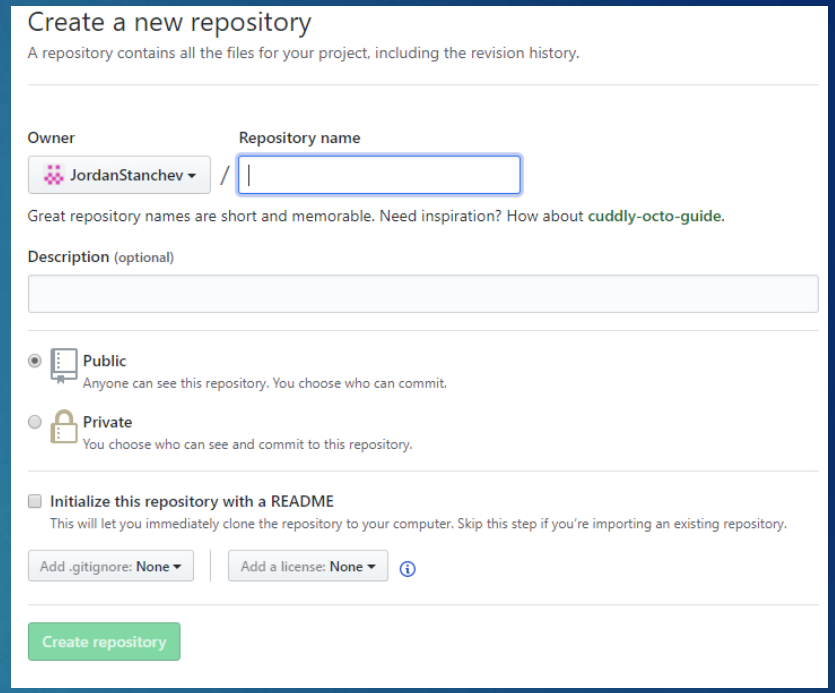
GitHub https://github.com/

- is a Web-based Git version control repository hosting service. It is mostly used for computer code. It offers all of the distributed version control and source code management (SCM) functionality of Git as well as adding its own features.
- It provides access control and several collaboration features such as bug tracking, feature requests, task management, and wiki pages for every project.

GitHub is today one of the most popular places where developers store their content and Git is theversioning system that they're using a lot.

What is GitHub?

- GitHub offers both plans for private and free repositories on the same account which are commonly used to **host open-source software projects.**
- As of June 2022, GitHub reported having over 83 million developers and more than 200 million repositories, including at least 28 million public repositories. **It is the largest source code host as of November 2021**.*



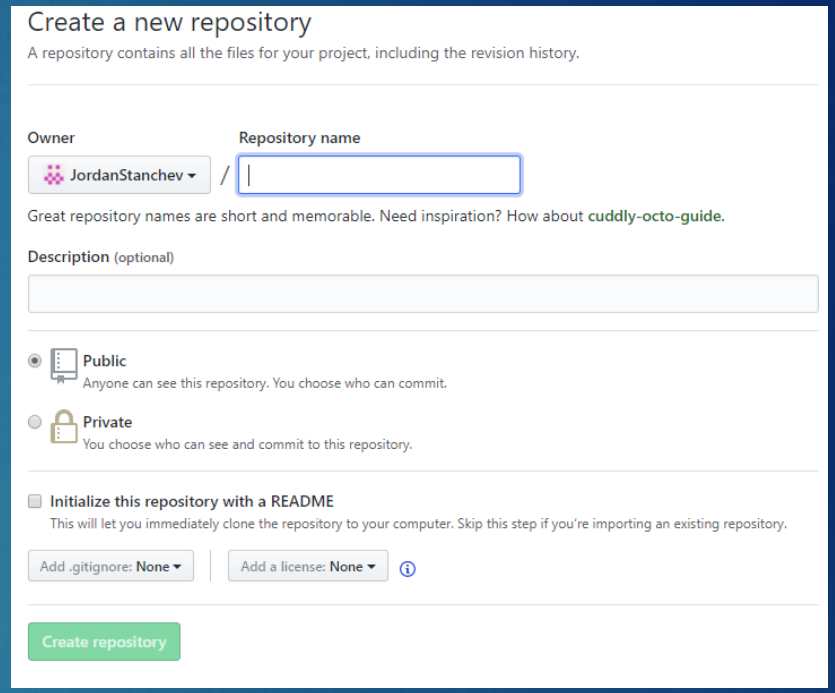
***Source:**
https://en.wikipedia.org/wiki/GitHub

What is GitHub?

A repository is simply a place where you put your files:

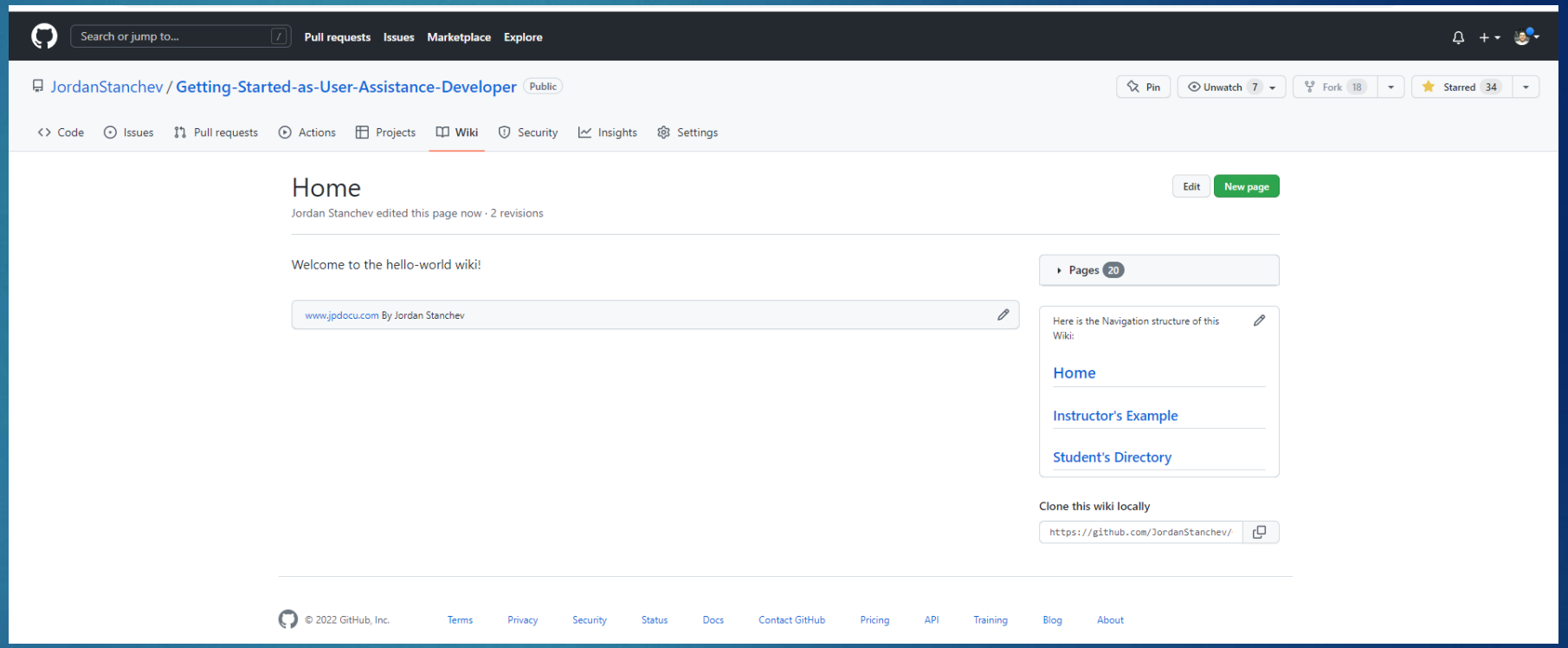
1. They have a free plan in which you end up with a publicly accessible and visible repository.
2. Or, they have these paid private plans which are for the companies who pay GitHub to use the same repository, but they do not want everyone to see what's inside it.

***Source:**
https://en.wikipedia.org/wiki/GitHub



Documentation in GitHub

Wiki pages for each project, allows you to write documentation directly using Markup language.



Markup Language

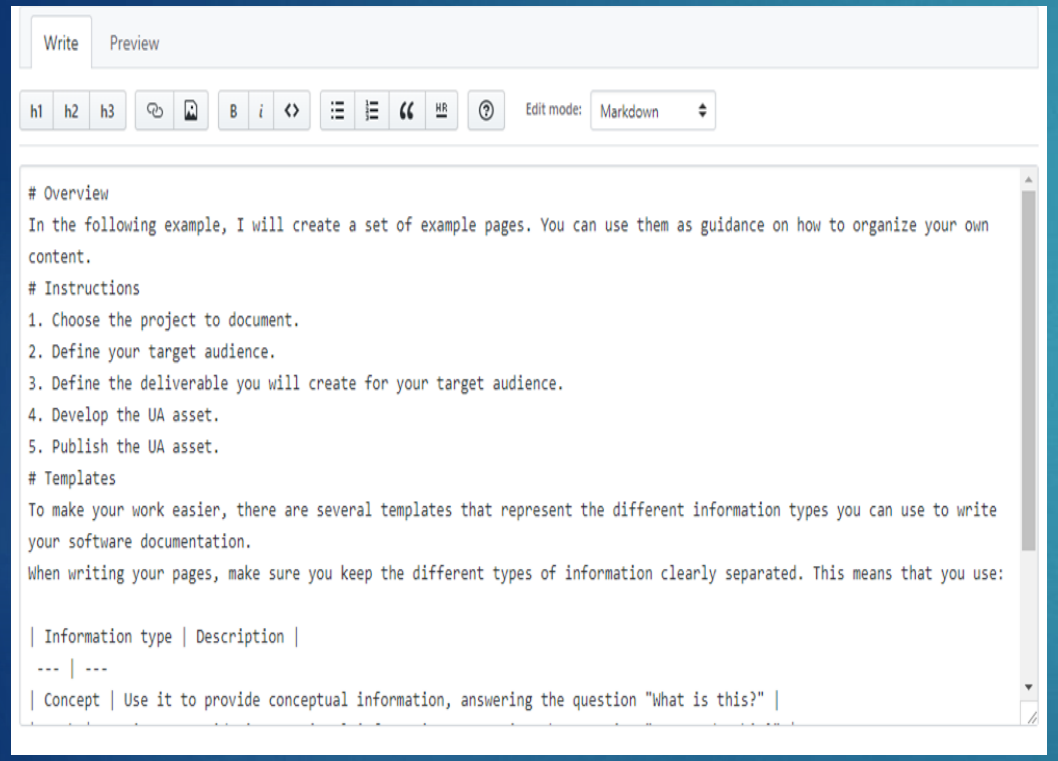
- A markup language is a system for annotating a document in a way that is syntactically distinguishable from the text.
- The idea and terminology evolved from the "marking up" of paper manuscripts, i.e., the revision instructions by editors, traditionally written with a blue pencil on authors' manuscripts

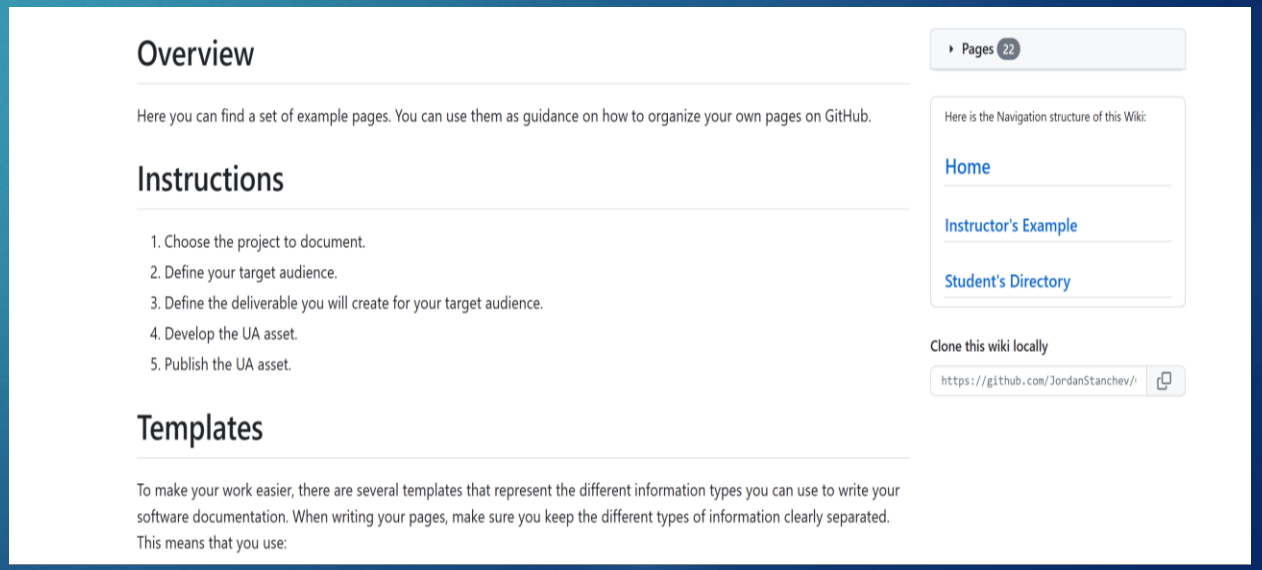
Markup language is called markdown

What is Markdown?

- Markdown is a lightweight markup language that **describes how text should look on a page. HTML is another example of a markup language.**
- Markdown is a style of writing documents that makes it easy to define what the content should look like.
- It describes headers, text styles, links, lists and so much more.

Instructor's Examples





Exercises in the Course

1. Create a new repository on GitHub.
2. Create a new page in your GitHub Wiki.
3. Create a page (topic) title and subtitle (H1 and H2)
4. Create a table
5. Upload images or other files to reference from the Wiki page
6. Create images in Wiki
7. Create links
8. Create a TOC (table of contents) for a large Wiki page
9. Create a link to a YouTube video

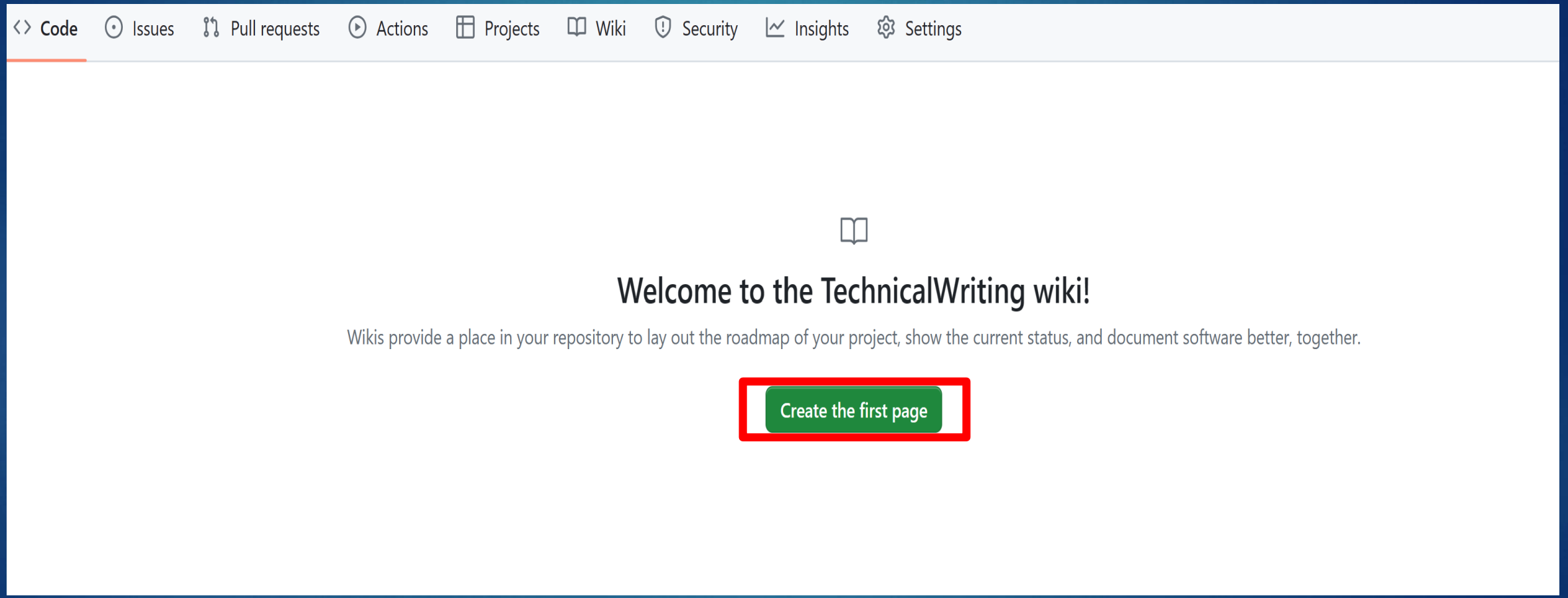
1-Create a New Repository in GitHub

Prerequisite: You must have an account in GitHub to create a repository.

To create your new public repository, go to https://github.com/new

https://docs.github.com/en/communities/documenting-your-project-with-wikis/adding-or-editing-wiki-pages

2-Create a New Page in GitHub



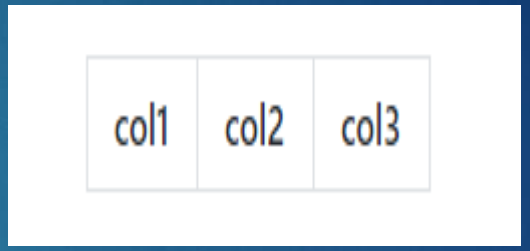
3.Create a page (topic) title and subtitle (H1 and H2)

https://www.markdownguide.org/basic-syntax/

4-Create a Table in GitHub Wiki

Syntax:

```
| col1 | col2 | col3 |
--- | --- | ---
```



You can create tables with pipes | and hyphens -. Hyphens are used to create each column's header, while pipes separate each column.

https://docs.github.com/en/get-started/writing-on-github/working-with-advanced-formatting/organizing-information-with-tables

5-Uploading Files and Images

1. Navigate to the Code page of your project.
2. Choose Add File.
3. Navigate to the location of the file and upload it to your repository.
4. Copy the link to the file.

https://gist.github.com/TT--/14260aef6c0e31fca5b37e7cb3c53020

6-Create an Image

Syntax:

```
![image](https://github.com/JordanStanchev/Getting-Started-as-User-Assistance-Developer/blob/master/rufous-5111260_640.jpg)
```

7-Create a Mail Link

Syntax:

Just like any web link, but start with *mailto:*

[link text](*mailto:*email address)

https://www.w3schools.io/file/markdown-links/

8-Create a TOC in Wiki

What to you think ?
How can we do it ?

https://linuxhint.com/markdown-table-contents/

9- Create a Link to YouTube Video

Syntax:

To embed a video link to a YouTube video:

```
<div align="left">
    <a href="https://www.youtube.com/watch?v=Z-vZuBX0Cmk">
        <img src="https://img.youtube.com/vi/Z-vZuBX0Cmk/0.jpg"
style="width:100%;">
    </a>
</div>
```

Where:

1. Link to the video *https://www.youtube.com/watch?v=Z-vZuBX0Cmk* is the link to your YouTube video;
2. Link to the thumbnail of your video. It is in this part of the code:
   <img src="https://img.youtube.com/vi/Z-vZuBX0Cmk/0.jpg" style="width:100%;">

Where *Z-vZuBX0Cmk* is the last part of your video URL.