

# Documentation

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Project documentation

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# 1. Welcome

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Welcome to the project documentation.

■ **Version 2.0** — Added versioning and PDF download for multiple languages.

## 1.1 Getting started

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Add sections and pages as needed. Navigation is configured in `mkdocs.yml` under the `nav` section.

## 1.2 Structure

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- **Home** — this page
- **Download PDF** — get the docs as PDF in English or Portuguese
- **Examples** — Hello World and more code samples in multiple languages
- Add new pages under `docs/` and reference them in `mkdocs.yml`

## 1.3 Export to PDF

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PDFs are generated on every build. The default-language PDF is at `site/pdf/documentation.pdf`. To build PDFs for both English and Portuguese, run:

```
./scripts/build-pdf-all.sh
```

WeasyPrint is required; on macOS install system dependencies first:

```
brew install cairo pango gdk-pixbuf
```

## 2. Download PDF

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Download the documentation as a single PDF. Choose your language:

[Download PDF — English](#)[Download PDF — Português](#)

### Two PDFs require the build script

A normal `mkdocs build` or `mkdocs serve` runs two language builds; the PDF is written to the same path each time, so you only get **one** file (Portuguese) and the PT link can 404. To get **both** PDFs (EN and PT) and working download links, run the script first, then serve the built site:

```
./scripts/build-pdf-all.sh
./scripts/serve-with-pdfs.sh
```

Then open the URL shown (e.g. `http://127.0.0.1:8000/repo/` or `http://127.0.0.1:8000/`). Both download buttons will work.

### One-off build (both PDFs, no server):

```
./scripts/build-pdf-all.sh
```

**Single PDF only** (e.g. for CI): run `mkdocs build` or `mkdocs serve`; the file is at `site/pdf/documentation.pdf` (content will be from the last build, usually PT).

## 3. Versioning

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Documentation is versioned with [mike](#). Use the version selector in the header to switch between **1.0**, **2.0**, and **2.1**. The version selector in the header lets users switch between deployed versions.

### 3.1 Prerequisites

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- Set `site_url` in `mkdocs.yml` to your deployment URL (e.g. `https://username.github.io/repo/`).
- Deploy the site to a branch (e.g. `gh-pages`) that `mike` will use.

### 3.2 Deploying a new version

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Deploy the current docs as a new version and set the `latest` alias:

```
mike deploy --push --update-aliases 1.0 latest
```

- `1.0` — version identifier (can be `2.0`, `dev`, etc.).
- `latest` — alias; visitors to the root URL are redirected to this version.

Deploy another version without changing the default:

```
mike deploy --push 0.9
```

### 3.3 Setting the default version

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Redirect the site root to the version pointed to by an alias:

```
mike set-default --push latest
```

After this, opening `site_url` will redirect to the `latest` version.

### 3.4 Aliases

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Use aliases for stable, dev, or specific releases:

```
mike deploy --push --update-aliases 2.0 latest
mike deploy --push 2.0-beta dev
mike deploy --push 1.0 stable
```

Then set the default, for example:

```
mike set-default --push latest
```

### 3.5 Local development

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Running `mkdocs serve` does not use `mike`; the version selector is populated only after deploying with `mike`. To test versioning, build and deploy at least one version to your branch.

### 3.6 Testing with local tags

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This repo has example tags **1.0**, **2.0**, and **2.1**. To deploy them with `mike` (e.g. to `gh-pages`):

```
mike deploy 1.0  
mike deploy 2.0  
mike deploy 2.1 latest  
mike set-default --push latest
```

Then open the deployed site and use the version selector to switch between 1.0, 2.0, and 2.1.

## 4. Examples

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### 4.1 Hello World

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Classic "Hello, World!" examples in different programming languages. Switch between them using the tabs below.

Python    JavaScript    Go    Java    C++    Ruby

```
print("Hello, World!")

console.log("Hello, World!");

package main

import "fmt"

func main() {
    fmt.Println("Hello, World!")
}

public class Main {
    public static void main(String[] args) {
        System.out.println("Hello, World!");
    }
}

#include <iostream>

int main() {
    std::cout << "Hello, World!" << std::endl;
    return 0;
}

puts "Hello, World!"
```

---

#### 4.1.1 Annotated example

The block below uses **line numbers** ( `linenums="1"` ), **highlighted lines** ( `hl_lines="2 3"` ), a **title**, and **annotations** — hover or tap the marker to see the note.

```
1 def greet():
2     print("Hello, World!") # (1)!
3     return None           # (2)!
```

1. Outputs the greeting to stdout. Use `print()` for simple console output.
2. Explicit `return None` is optional in Python; the function returns `None` by default.

## 4.2 More examples

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Additional "Hello, World!" samples in other languages. Use the tabs to switch.

**Rust**    **PHP**    **Swift**    **Kotlin**    **C**    **Bash**

```
fn main() {  
    println!("Hello, World!");  
}
```

```
<?php  
echo "Hello, World!";  
  
print("Hello, World!");
```

```
fun main() {  
    println("Hello, World!")  
}
```

```
#include <stdio.h>  
  
int main(void) {  
    printf("Hello, World!\n");  
    return 0;  
}
```

```
echo "Hello, World!"
```