

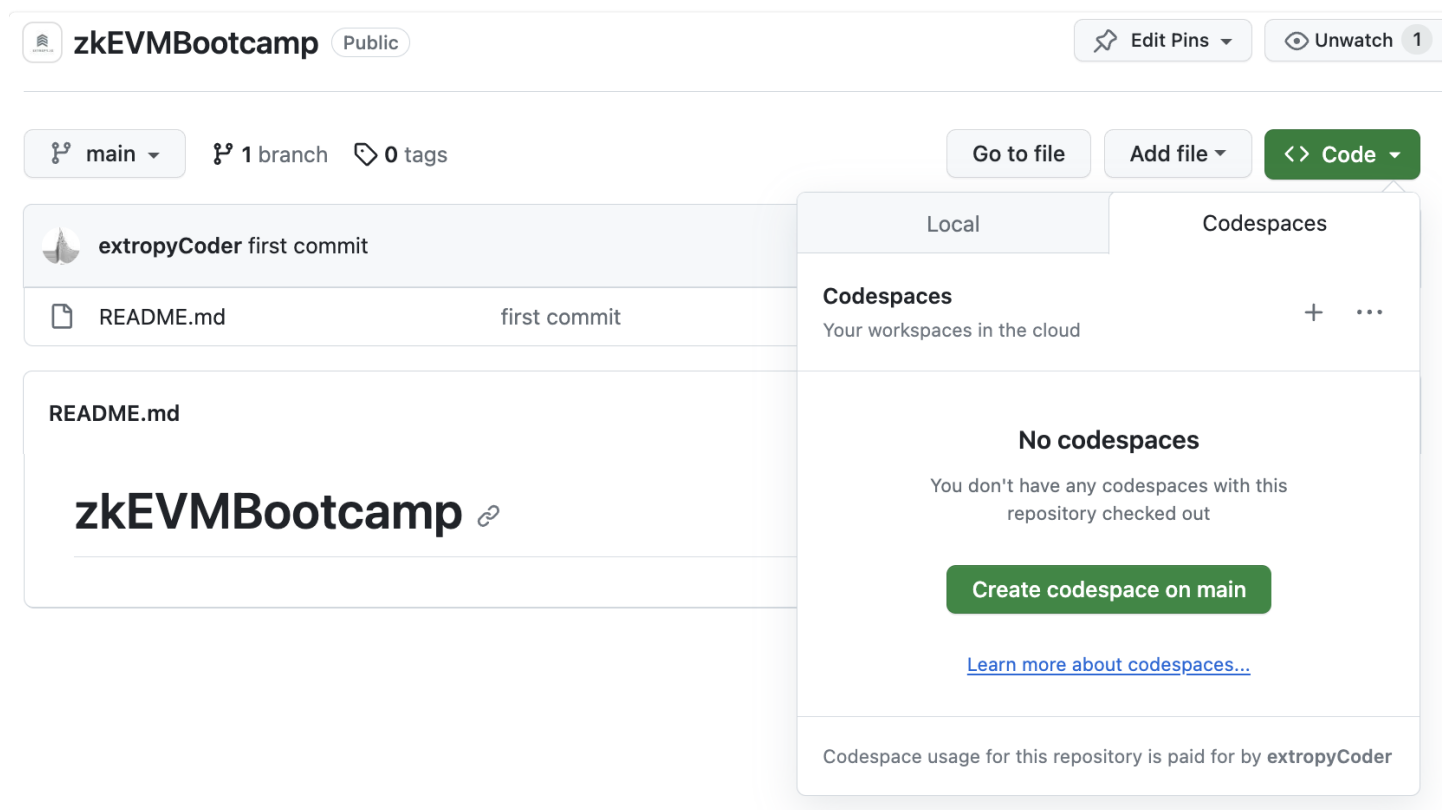
Homework 3

zkEVM Set Up Environment

In preparation for the development tasks we will be doing, we need to setup a development environment.

For Windows users : it may be best to use WSL2 .

For all users : if you have problems with installing any of the projects, I advise you to use a codespace on the bootcamp repo.



The screenshot shows the GitHub repository page for **zkEVMBootcamp**, which is a public repository by the user **extropyCoder**. The repository has 1 branch (main) and 0 tags. The README file is visible, showing the repository name **zkEVMBootcamp** with a link icon. A **Codespaces** overlay is open, displaying the 'Local' and 'Codespaces' tabs. The 'Codespaces' tab shows 'No codespaces' and a message: 'You don't have any codespaces with this repository checked out'. A green button labeled 'Create codespace on main' is present, along with a link to 'Learn more about codespaces...'. At the bottom of the overlay, it states: 'Codespace usage for this repository is paid for by extropyCoder'.

1. Install the Rust toolchain

See [Instructions](#)

```
curl --proto '=https' --tlsv1.2 -sSf  
https://sh.rustup.rs | sh
```

2. Install a browser wallet if you don't already have one.

..

Zustlings for zkEVM

We have some Rust exercises for you to work through

These are in the bootcamp [repo](#)

You can either clone this locally or set up a codespace

Windows users

It may help to use WSL, or if you still have problems we suggest using a codespace as above.

Installing Zustlings

1. Make sure you have rust installed
2. In the `rust` directory run

```
cargo install --force --path .
```

Doing exercises

In the rust directory run

```
zustlings homework n
```

Where n is the number of the homework you are doing, e.g.

```
zustlings homework 3
```

You will need to open another terminal so that you can edit the files

When you start, it will start with the code in
homework3/variables/variable1.rs

As you can see it does not compile

```
⚠ Compiling of homeworks/homework4/variables/variables1.rs failed! Please try again. Here's the output:
error[E0425]: cannot find value `y` in this scope
--> homeworks/homework4/variables/variables1.rs:8:5
  |
8 |     y = 5;
  |     ^
  |
help: you might have meant to introduce a new binding
  |
8 |     let y = 5;
  |     +++

error[E0425]: cannot find value `y` in this scope
--> homeworks/homework4/variables/variables1.rs:9:36
  |
9 |     println!("y has the value {}", y);
  |                                   ^ not found in this scope

error: aborting due to 2 previous errors

For more information about this error, try `rustc --explain E0425`.

Spawning homeworkd watch shell
Welcome to watch mode! You can type 'help' to get an overview of the commands you can use here.
```

You need to make the change to the code in this file so that it will compile,
when you save the file , it will recompile and show you if there are still
errors.

```
⌘ Compiling homeworks/homework4/variables/variables1.rs...
✅ Successfully ran homeworks/homework4/variables/variables1.rs!

🎉🎉 The code is compiling! 🎉🎉

Output:
=====
y has the value 5
=====

You can keep working on this exercise,
or jump into the next one by removing the `I AM NOT DONE` comment:

3 | // Execute the command `zustlings hint variables1` if you want a hint :)
4 |
5 | // I AM NOT DONE
6 |
7 | fn main() {
```

Once you have finished a particular file
remove the comment `// I AM NOT DONE`

and you will be taken to the next file that you need to fix.