# Topic 1: Introduction

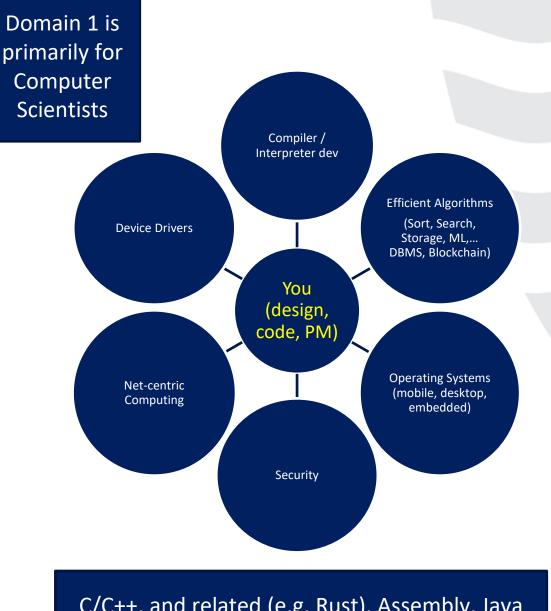
- An overview of where this course fits in the life of a Computer Science major.
- An overview of JavaScript: evolution strengths, weaknesses and why the use in this course.
- Get started with basic development tools for the course
  - VS Code IDE
  - Remix
  - Docker
  - Git

## ...Topic 1: Introduction

 An overview of where this course fits in the life of a Computer Science major.

...Topic 1: Introduction

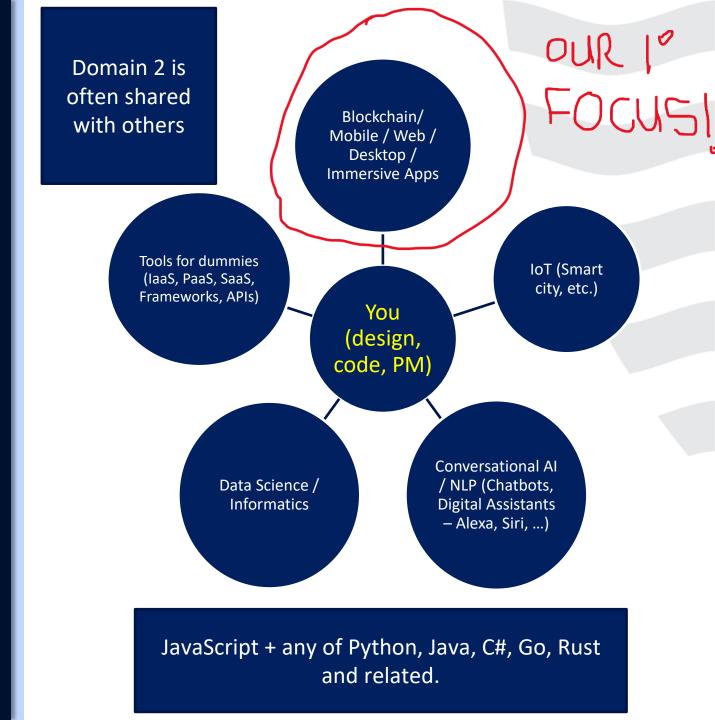
**CS Problem** Domain 1: Mainly computational systems facing



C/C++, and related (e.g. Rust), Assembly, Java

...Topic 1: Introduction

CS Problem
Domain 2:
Mainly user
facing and
applied fields



Getting started
with basic
development
tools for the
course

VS Code IDE Remix Docker Git

- VS Code IDE download
  - https://code.visualstudio.com/download
- Docker download
  - https://www.docker.com/products/dockerdesktop/
- Git for Windows download
  - https://git-scm.com/download/win
- W NodeJS
  - <a href="https://nodejs.org/en/download/">https://nodejs.org/en/download/</a>
- Expo Snack (online React Native test environment)
  - <a href="https://snack.expo.dev/">https://snack.expo.dev/</a>
- Remix IDE (an online IDE)
  - https://remix.ethereum.org/
- Hardhat
  - https://hardhat.org/

Getting started with basic development tools for the course

VS Code IDE Remix Docker Git

- Experience docker with dockercompose
  - Create a lesson project:
    - 1. Create a directory named CSC202-2023set
    - 2. Open folder in VS Code
    - 3. Add two files named
      - docker-compose.yml
      - csc2022.env

Getting started with basic development tools for the course

VS Code IDE Remix Docker Git • 4. Add the following content to *docker-compose.yml*:

```
version: '3'
services:
    database:
          container name: postgres-csc2022
          image: postgres:latest
          ports:
               - "5433:5432"
          volumes:
               - /Users/piusonobhayedo/data/postgres/csc2022:/data/postgres
          env file:
                   csc2022.env
```

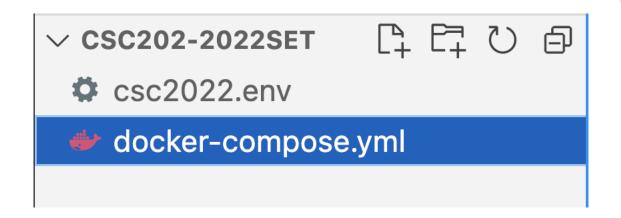
Reference for docker-compose.yml syntax: https://docs.docker.com/compose/compose-file/

Getting started with basic development tools for the course

VS Code IDE Remix Docker Git • 5. Add the following content to *csc2022.env*:

POSTGRES\_DB=csc2022
POSTGRES\_USER=postgres
POSTGRES\_PASSWORD=postgres

Project tree:



Getting started with basic development tools for the course

VS Code IDE Remix Docker Git

- Test-run docker-compose on terminal, from the trial project directory CSC202-2022set by running the command:
  - docker-compose up
- You should see the startup feedback on terminal

```
2022-03-23 11:58:55.563 UTC [1] LOG: database system is ready to accept connections
postgres-csc2020 | 2022-03-23 11:58:55.544 UTC [27] LOG: redo is not required
postgres-csc2020 | 2022-03-23 11:58:55.544 UTC [27] LOG: invalid record length at 0/15C7620: wanted 24,
omatic recovery in progress
postgres-csc2020 | 2022-03-23 11:58:55.542 UTC [27] LOG:
                                                             database system was not properly shut down; aut
at 2022-03-23 11:49:48 UTC
postgres-csc2020 | 2022-03-23 11:58:55.302 UTC [27] LOG: database system was interrupted; last known up
                    2022-03-23 11:58:55.294 UTC [1] LOG: listening on Unix socket "/var/run/postgresql/.s
                   2022-03-23 11:58:55.288 UTC [1] LOG: listening on IPv6 address "::", port 5432

    on x86_64-pc-linux-gnu, compiled by gcc (Debian 8.3.0-6) 8.3.0, 64-bit
postgres-csc2020 | 2022-03-23 11:58:55.288 UTC [1] LOG: listening on IPv4 address "0.0.0.0", port 5432

                   2022-03-23 11:58:55.288 UTC [1] LOG: starting PostgreSQL 13.3 (Debian 13.3-1.pgdg100-
                   PostgreSQL Database directory appears to contain a database; Skipping initialization
postgres-csc2020
Attaching to postgres-csc2020
Starting postgres-csc2020 ... done
(base) piusonobhayedo@Piuss-MacBook-Pro-2 CSC202-2020set % docker-compose up
```

More explanations in class!

Getting started with basic development tools for the course

VS Code IDE Remix Docker Git Before we use our lesson project directory for JavaScript, Git initialize it by running on terminal, from the directory:

git init

- To add a remote directory on GitHub:
  - 1. Login to your GitHub account online
  - 2. Create a new repository named
  - 3. Copy the URL of the remote directory for local association
  - 4. Associate with the following command, on local terminal [PLEASE use your own repository address and not mine below]:

git remote add origin https://github.com/piosystems/csc202-2022set.git