

Introduction to Frontend Development

Week 1

Names/Presentation

- Name
- Country of Origin
- Why do you want to become a developer?
- Is there something that worries you before jumping into this journey?
- What was your least favorite food as a child?



Agenda

1. Course Introduction
2. Course Goal
3. Classroom Culture
4. Introduction to coding
5. Small code review
6. Slack
7. Development Environment Setup
8. Homework



WIFI

network: Adapt-Guest

password: welcometoadapt

Course Introduction

Week 1 (today)

Introduction to the course, programming in general

Week 2

Theory of HTML and CSS

Week 3

JavaScript Variables and functions

Week 4

Functions and DOM manipulation, Introduction to GitHub. HomeWork #1

Week 5

Event listeners/DOM, Basic operations using variables. Continuation of Git-intro

Week 6

Logical operators, conditionals Check HomeWork #1 -> HomeWork#2

Week 7

Arrays. Feedback on HoweWork #1

Week 8

Arrays + loops. Hand in HoweWork #2

Week 9

Objects + Project Introduction. Feedback HW #2

Week 10

Project Start. Recap on functions and control flow

Week 11

Project work continued. Hosting projects on GitHub

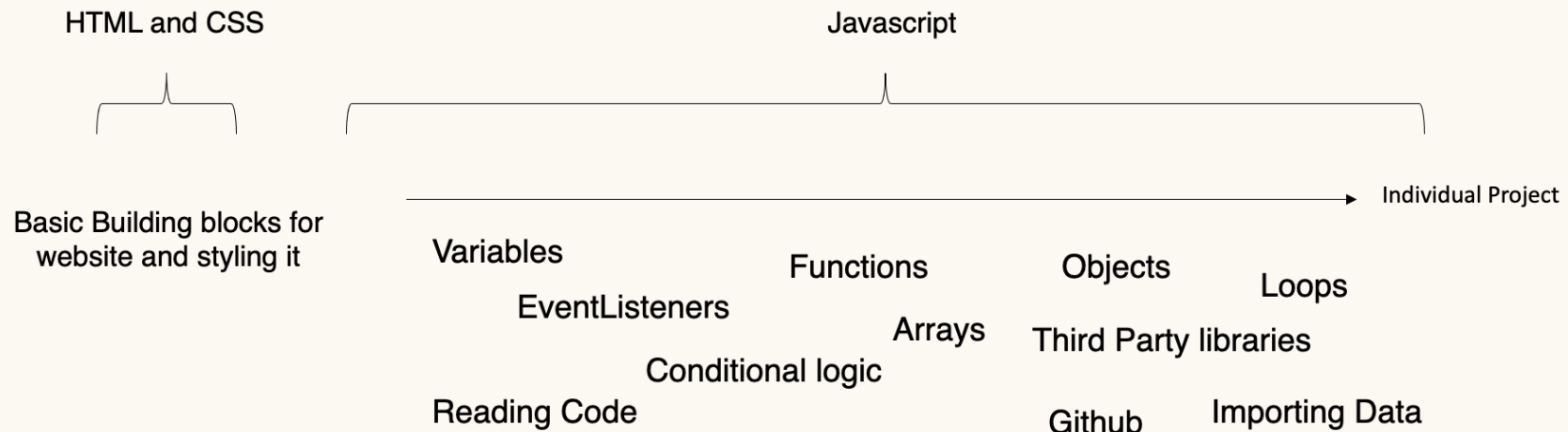
Week 12

Presentation of project

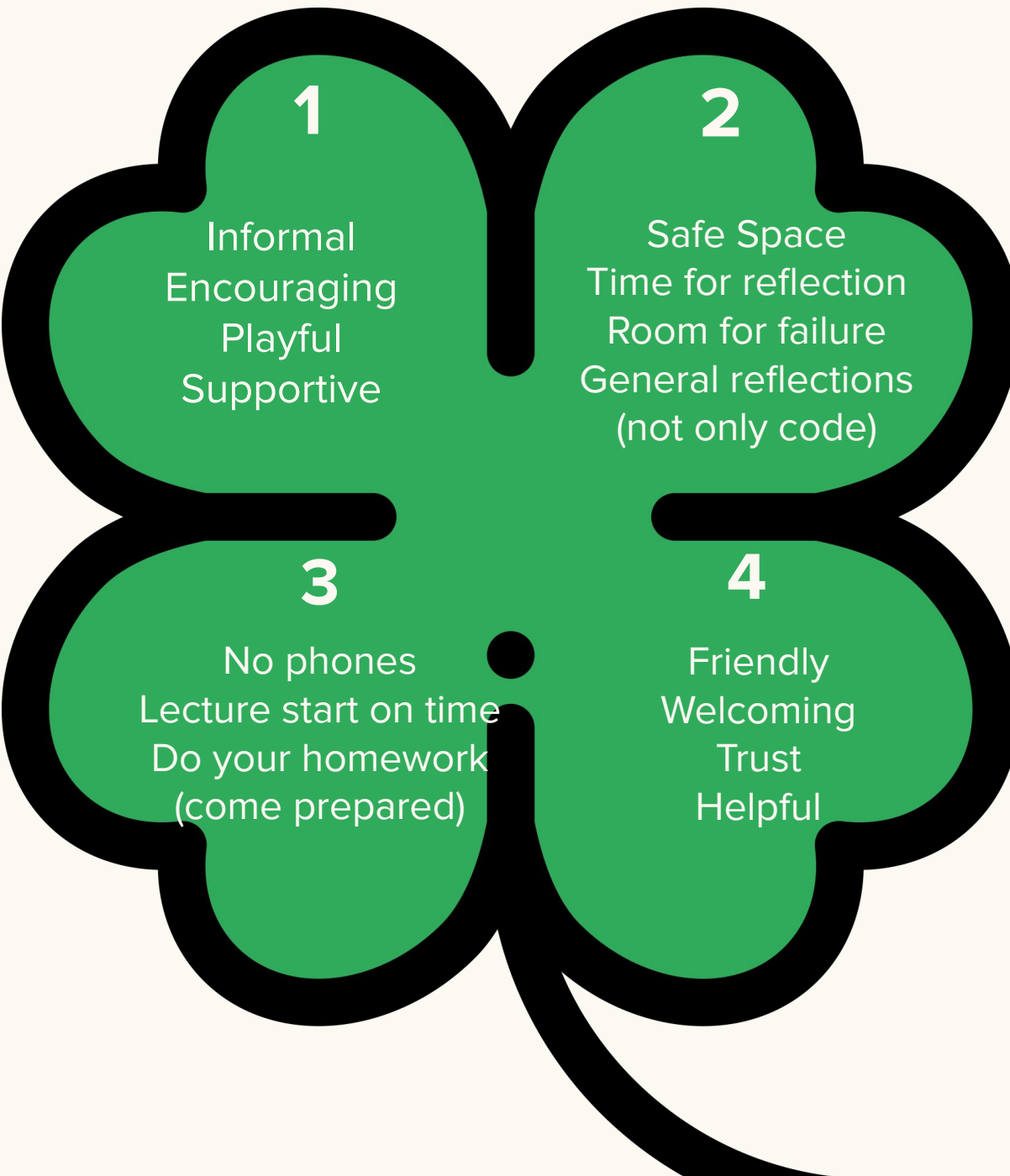


What's our plan?

What does a semester look like?



Classroom Culture



1

What type of atmosphere do we wish to create?

2

Which values do we want in our class?

3

Which rules do we want in our classroom?

4

How do we want our interactions between students?



Course goal

“The purpose of the course is that students acquire skills within Front-end web development using HTML, CSS and JavaScript. The course should be interpreted as a stepping stone for progressing towards a digital career, providing the students with hands-on experience by building a project for their portfolio ”



Course Certification



Copenhagen, June 21st, 2022

Certificate of Participation

To whom it may concern,

We hereby confirm that [REDACTED]
has participated in the following course at the ReDI School of Digital Integration DK:

Introduction to JavaScript

Introduction to JavaScript is a 12-weeks course aiming to teach the basic concepts of programming. The course consisted of 36 confrontation hours as well as assignments, self-studying and project work. During the course, the student has worked on a coding project by own choice and has developed a product using JavaScript independently. The student has been introduced to:

- HTML & CSS
- JS interaction with HTML
- Problem solving
- Basic building blocks, including data types, variables, operators and comments
- Flow control, including conditions and loops
- Objects, arrays, functions

By the end of the course, students should be able to understand the concept of coding, JavaScript terminology and develop JavaScript products equivalent to an introductory level.

ReDI School of Digital Integration DK is a non-profit IT-school (almennyttig forening), that works for digital empowerment of women with refugee and migrant background in Copenhagen. The courses offered at ReDI School are not part of governmental policies or public programs. Participation in the courses is voluntary and free for the participants. ReDI School is financed through donations and works through the voluntary commitment of the teachers.

If you have any questions, you are more than welcome to contact me.

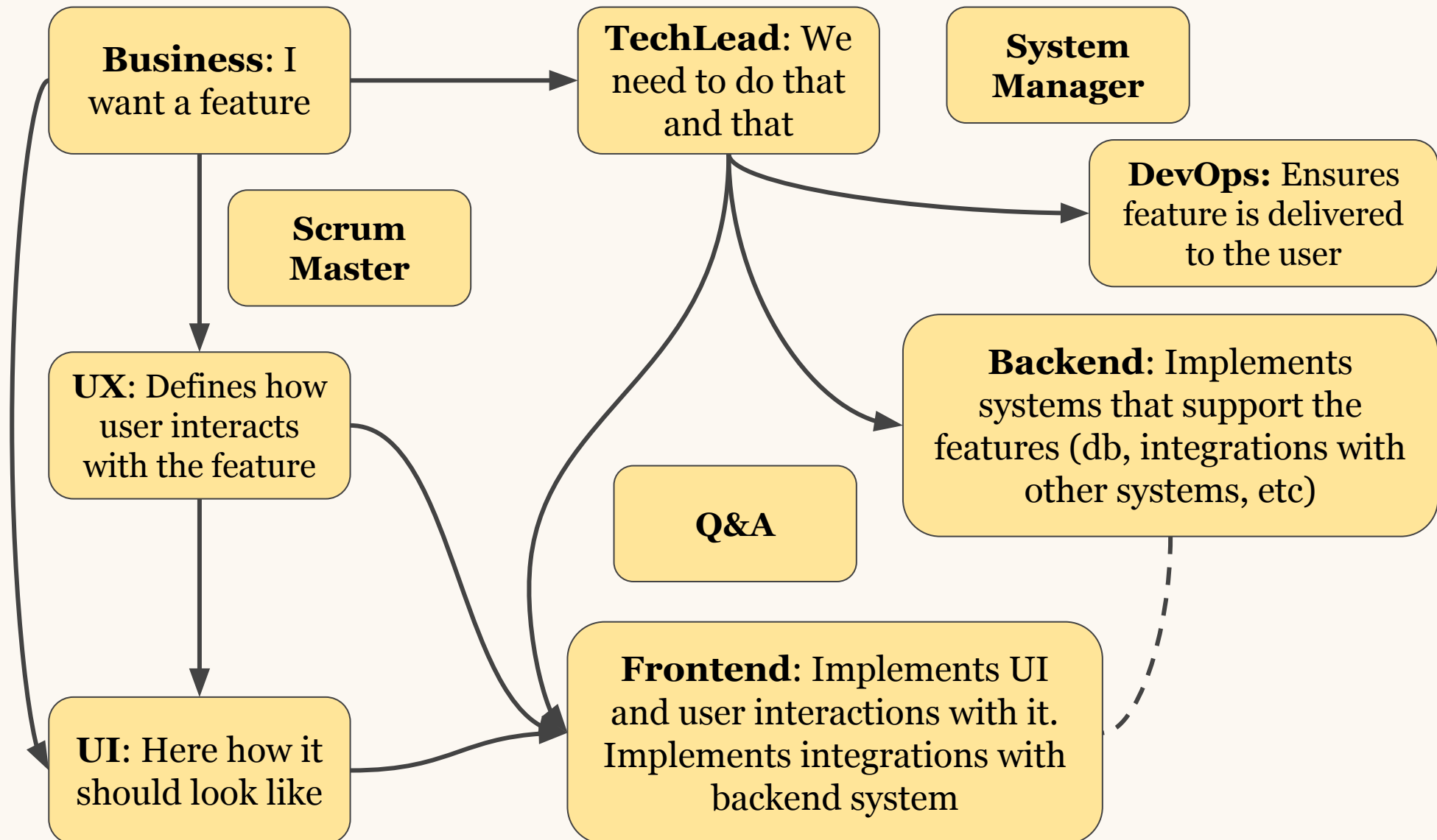
All the best,

Rie Meyer Sørensen

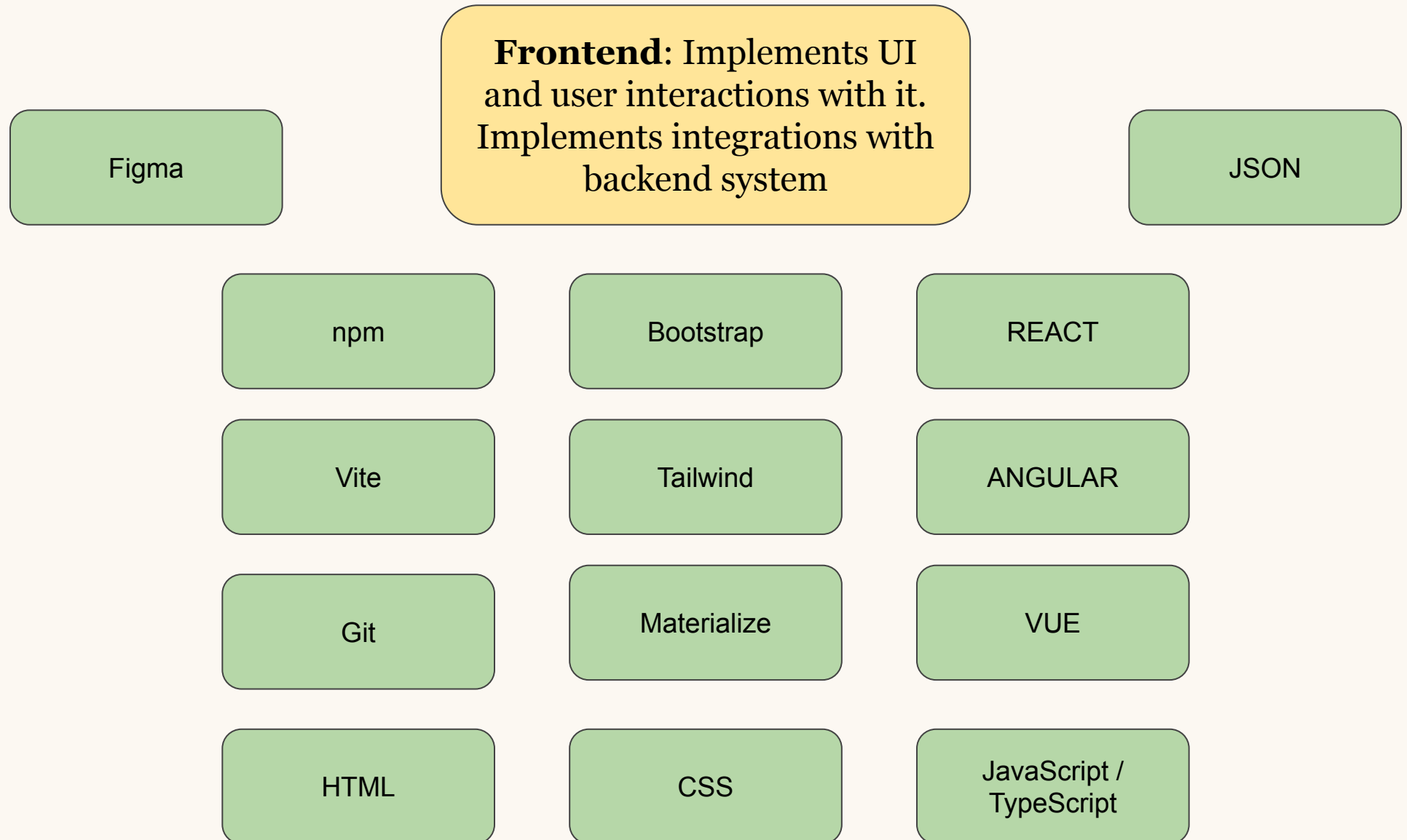
Acting Local Head
ReDI School of Digital Integration DK
Bygmestervej 10, 1. Sal
2400 København NV.



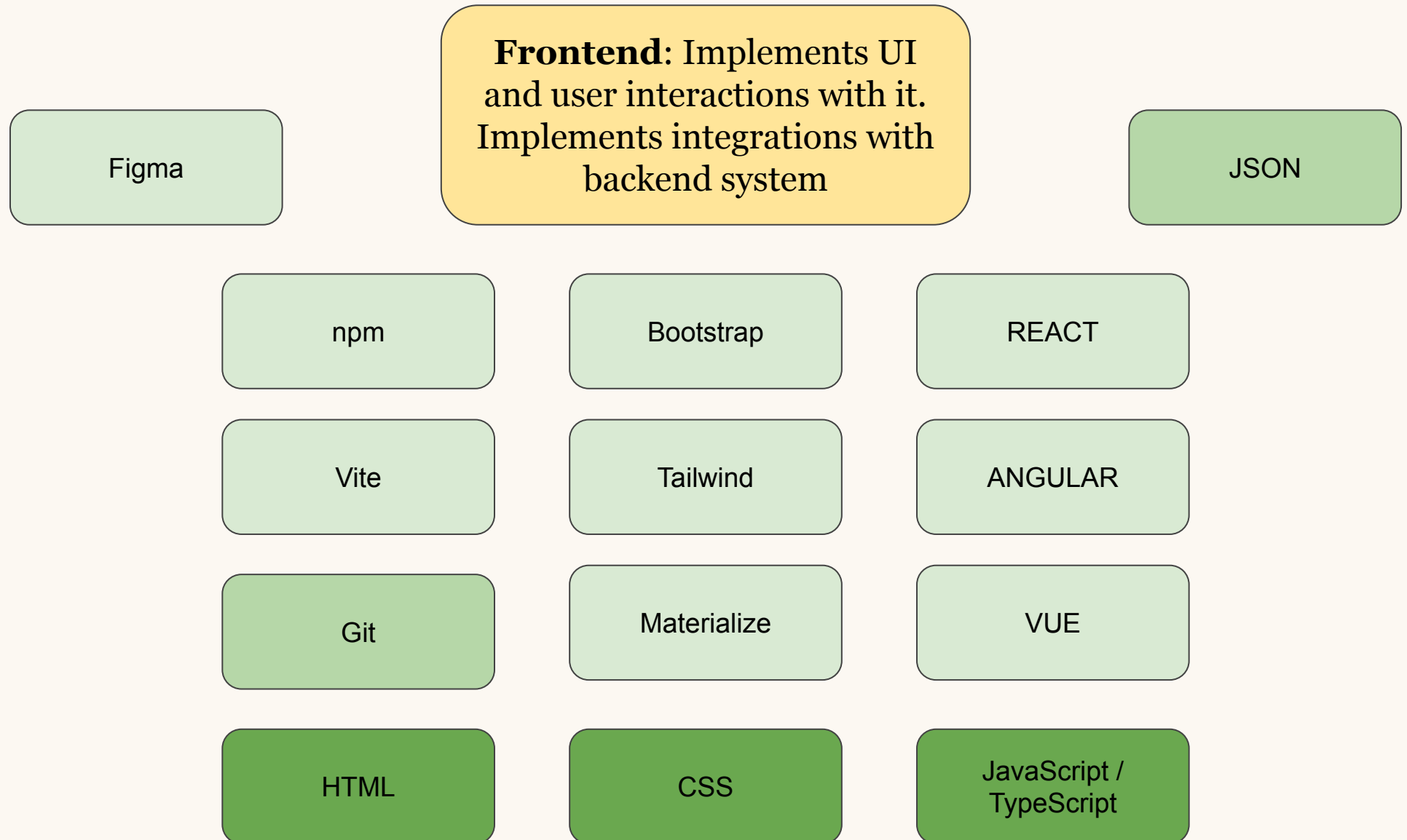
Terminology



FrontEnd Developer's Technologies



FrontEnd Developer's Technologies



Break



What is programming/coding

“Programming is the act of instructing computers to carry out tasks.” It is often referred to as **coding**.

So then, what is a **computer program**? A computer program is a sequence of instructions that the computer executes.

And what is a computer? In the definition above is any device that is capable of processing code. This could be smartphones, ATMs, the Raspberry Pi, Servers, etc

Source: [FreeCodeCamp.org](https://www.freecodecamp.org)













What is programming/coding



Enter Programming Languages

Top 10
Programming
Languages

										
	Python	C	Java	C++	C#	R	JavaScript	PHP	Go	Swift
Paradigm	Multi-paradigm: object-oriented, imperative, functional, procedural, reflective	Imperative (procedural), structured	Multi-paradigm: object-oriented (class-based), structured, imperative, generic, reflective, concurrent	Multi-paradigm: procedural, functional, object-oriented, generic	Multi-paradigm: structured, imperative, object-oriented, event-driven, task-driven, functional, generic, reflective, concurrent	Multi-paradigm: array, object-oriented, imperative, functional, procedural, reflective	Multi-paradigm: object-oriented (prototype-based), imperative, functional, event-driven	Imperative, object-oriented, procedural, reflective	Compiled, concurrent, imperative, structured	Multi-paradigm: protocol-oriented, object-oriented, functional, imperative, block-structured
Designed by	Guido van Rossum	Dennis Ritchie	James Gosling	Bjarne Stroustrup	Microsoft	Ross Ihaka and Robert Gentleman	Brendan Eich	Rasmus Lerdorf	Robert Griesemer, Rob Pike, Ken Thompson	Chris Lattner and Apple Inc
Developer	Python Software Foundation	Dennis Ritchie & Bell Labs (creators), ANSI X3J11 (ANSI C), ISO/IEC	Sun Microsystems (now owned by Oracle corporation)	Bell Labs	Microsoft	R Core Team	Netscape Communications Corporation, Mozilla Foundation, Ecma International	The PHP Development Team, Zend Technologies	Google Inc.	Apple Inc
First appeared	20 February 1991 (26 years ago)	1972 (45 years ago)	May 23 1995 (22 years ago)	1983 (34 years ago)	2000 (17 years ago)	August 1993 (24 years ago)	December 4, 1995 (21 years ago)	June 8, 1995 (22 years ago)	November 10, 2009 (7 years ago)	June 2, 2014 (3 years ago)
Typing discipline	Duck, dynamic, strong	Static, weak, manifest, nominal	Static, strong, safe, nominative, manifest	Static, nominative, partially inferred	Static, dynamic, strong, safe, nominative, partially inferred	Dynamic	Dynamic, duck	Dynamic, weak, gradual (as for PHP 7.0.0)	Strong, static, inferred, structural	Static, strong, inferred
Platform	Cross-platform	Cross-platform	Windows, Solaris, Linux, OS X	Linux, MacOS, Solaris	Common Language Infrastructure	UNIX platforms, Windows, MacOS	Cross-platform	Unix-like, Windows	Linux, macOS, FreeBSD, NetBSD, OpenBSD, Windows, Plan 9, DragonFly BSD, Solaris	Darwin, Linux, FreeBSD
Filename extensions	.py, .pyc, .pyo (prior to 3.5), .pyw, .pyz (since 3.5)	.c, .h	.java, .class, .jar	.cc, .cpp, .C, c++, .h, .hh, .hpp, .hxx, .h++	.cs	.r, .R, .RData, .rds, .rda	.js	.php, .phtml, .php3, .php4, .php5, .php7, .phps	.go	.swift

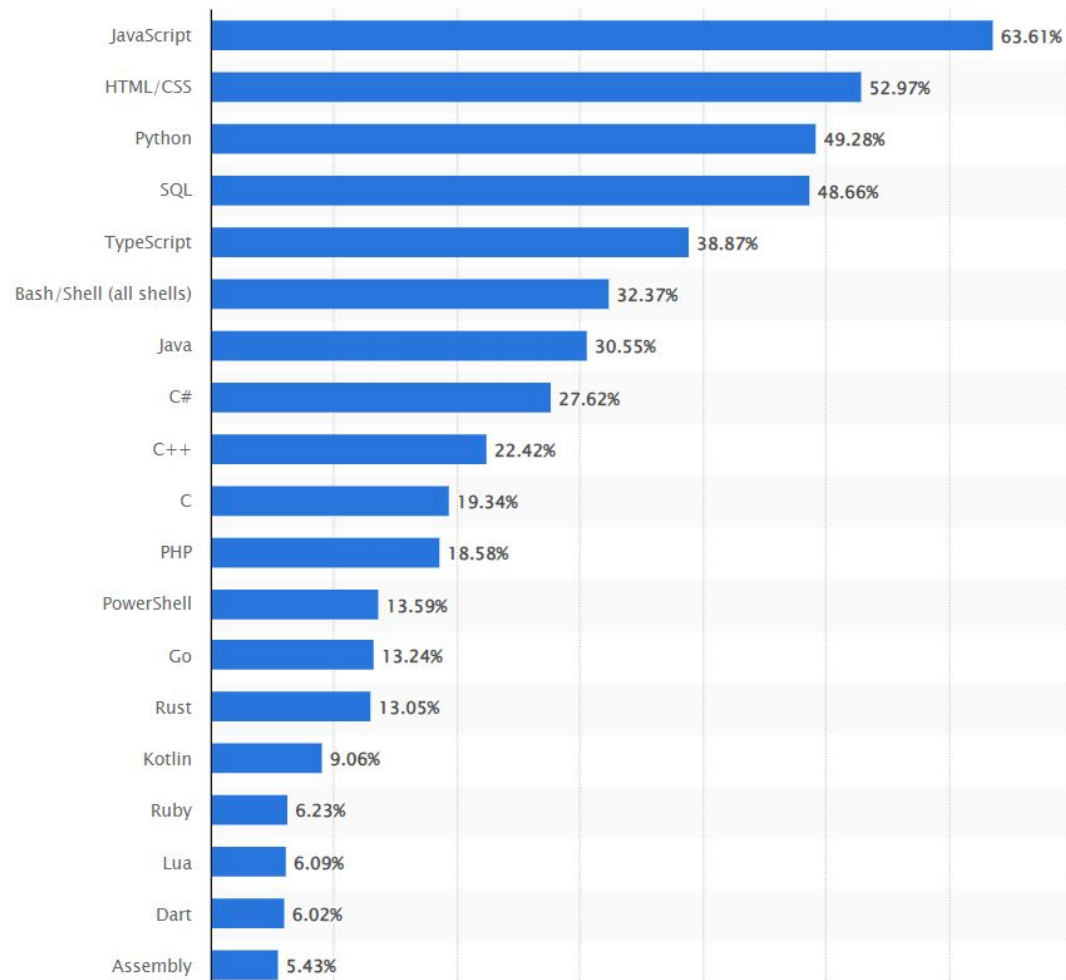
Source: <https://i.pinimg.com/originals/37/07/23/37072349abbbdf9aa86321eb07e1804e.png>



Enter Programming Languages

Technology & Telecommunications › Software

Most used programming languages among developers worldwide as of 2023



DOWNLOAD



Source

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Release date

June 2023

Region

Worldwide

Survey time period

May 8, 2023 to May 19, 2023

Number of respondents

87,585 respondents

Special properties

Software developers

Method of interview

Online survey

Supplementary notes

*Multiple responses were possible.



Our programming languages



What's the Difference?



HTML

Hypertext Markup Language

Create the structure

- Controls the layout of the content
- Provides structure for the web page design
- The fundamental building block of any web page



CSS

Cascading Style Sheet

Stylize the website

- Applies style to the web page elements
- Targets various screen sizes to make web pages responsive
- Primarily handles the "look and feel" of a web page



Javascript

Increase interactivity

- Adds interactivity to a web page
- Handles complex functions and features
- Programmatic code which enhances functionality



Small code review

```
<body>  
  <h1>In class exercises</h1>  
  
  <span>These are my favourite numbers</div>  
  
  <ul>five</ul>  
  <ul>seven</ul>  
  <ul>two</ul>  
  
</body>
```



Break



Our Development Environment



VSCode

Live server
extension



Google Chrome



Slack



**Github user
account**



ChatGPT



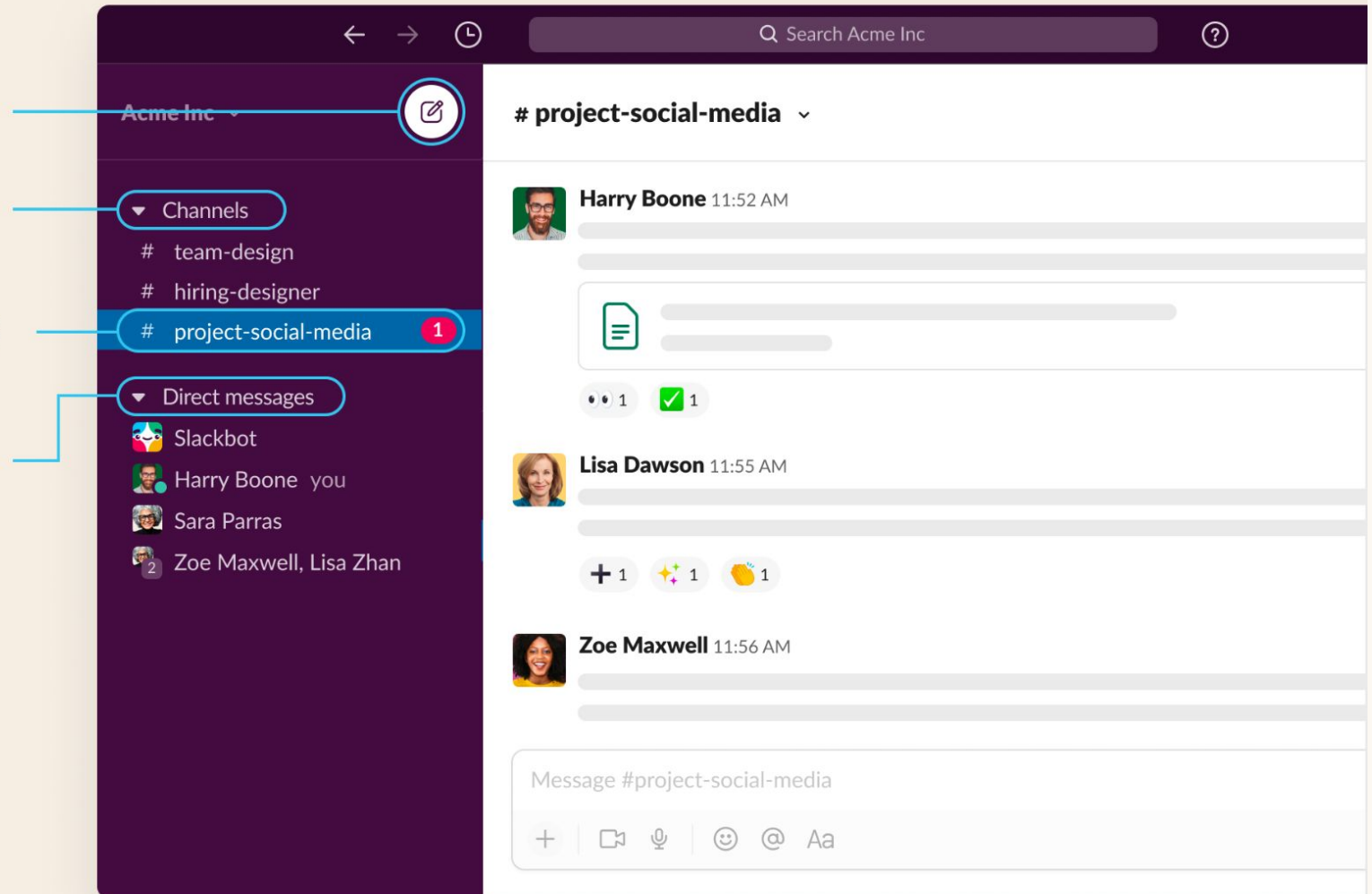
Slack

Compose

Channels

Notifications

Direct
messages



Slack

- Main way of communicating with ReDI School throughout the semester
- Announcements and feedback from Teachers will be shared
- General questions about the semester structure and organization will be answered



Slack

Please, if you already have your Github user created, please write in the channel your Github account name like this:

My github account name is: {githubAccountName}





Download and install

Search entire site...

Git is a **free and open source** distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is **easy to learn** and has a **tiny footprint with lightning fast performance**. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like **cheap local branching**, convenient **staging areas**, and **multiple workflows**.

About
The advantages of Git compared to other source control systems.

Documentation
Command reference pages, Pro Git book content, videos and other material.

Downloads
GUI clients and binary releases for all major platforms.

Community
Get involved! Bug reporting, mailing list, chat, development and more.

Latest source Release
2.43.0
[Release Notes \(2023-11-20\)](#)
[Download for Windows](#)

```
PS D:\ReDi\2023_2_Semester\week11> git -v  
git version 2.41.0.windows.3
```

<https://git-scm.com/>



PowerShell, Bash, CommandPrompt introduction

Windows Terminal

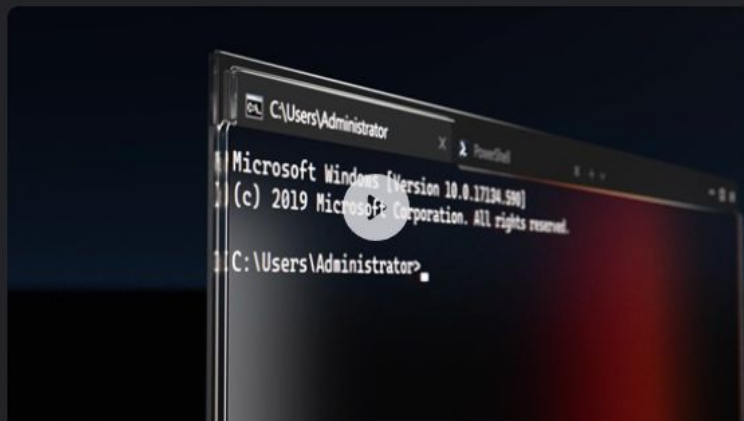
Microsoft Corporation

4.4 ★ 88 bedømmelser Udviklerværktøjer



Download

Skærbilleder



Home Work

. Read

Only the following sections!!: 'What is HTML', 'Anatomy of an HTML element', 'Attributes' and 'Anatomy of an HTML document'

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Getting_started

. Watch

<https://www.youtube.com/watch?v=PlxWf493en4>

. Do

Try to follow the video from above and bring to the lecture next week your very first website. By this, we mean create your first HTML document with at least a title, a paragraph, an image and an anchor link

