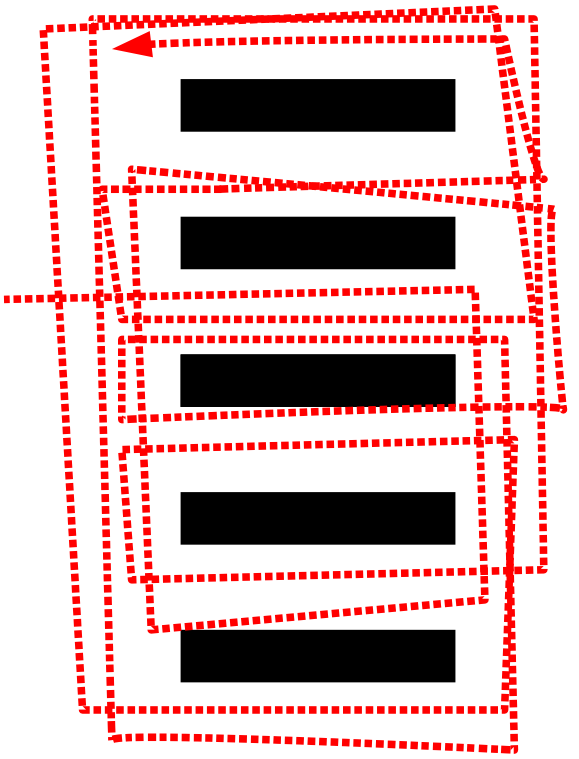
Corn Flakes
Bread
Body Lotion
Oranges
Marg
Flour
Washing Powder
Bread rolls
Ice cream
Grapes
Carrots
Soap



Fruit n veg

Oranges

Grapes

Carrots

Dairy

Marg

Ice cream

Bread n bake

Flour

Bread rolls

Bread

Bathroom

Body Lotion

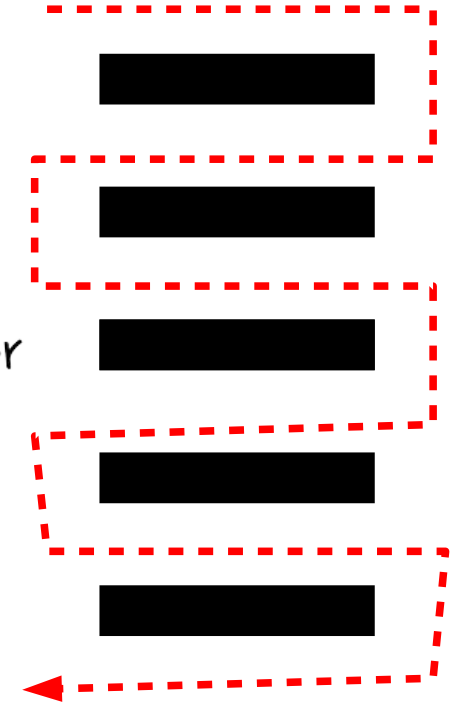
Kitchen

Washing Powder

Soap

Breakfast

Corn Flakes



Fruit n veg

- Oranges
- Grapes
- Carrots

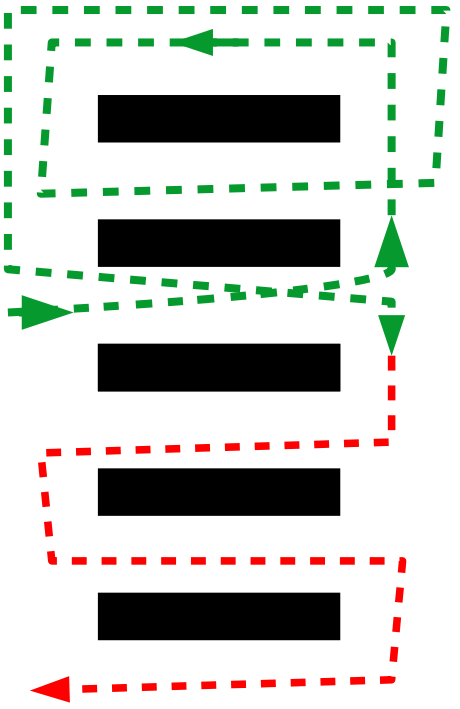
Dairy

- Marg
- Ice cream

Bread n bake

- Flour
- Bread rolls
- Bread

Body Lotion
Washing Powder
Soap
Corn Flakes



Fruit n veg

Oranges

Grapes

Carrots

Dairy

Marg

Ice cream

Bread n bake

Flour

Bread rolls

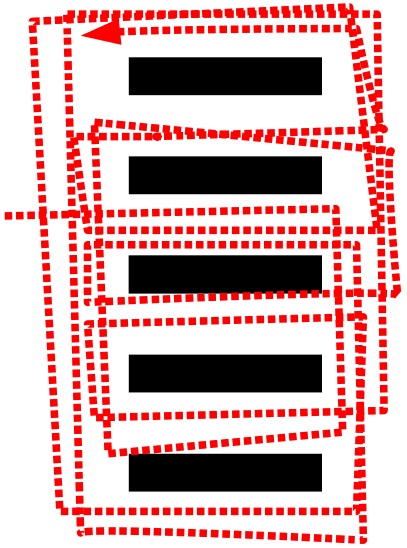
Bread

Body Lotion

Washing Powder

Soap

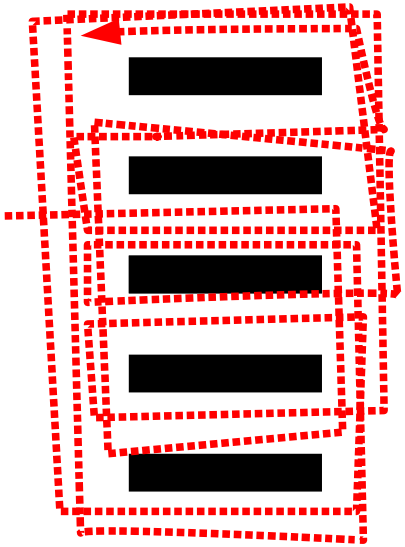
Corn Flakes

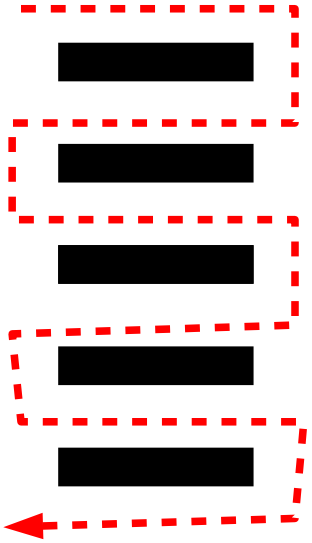


Interpreter

Immediately runs

Not efficient; can run slow





Interpreter

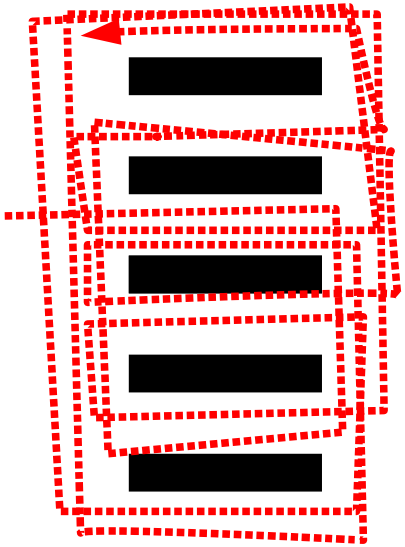
Immediately runs

Not efficient; can run slow

Compiler

Delay before running

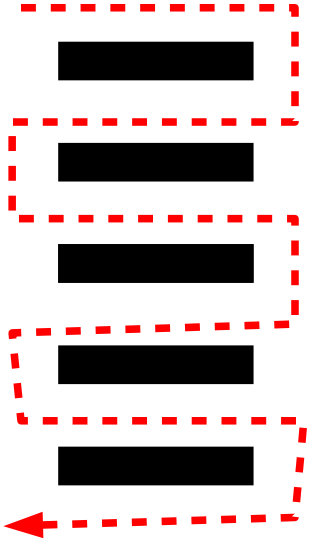
Runs efficiently



Interpreter

Immediately runs

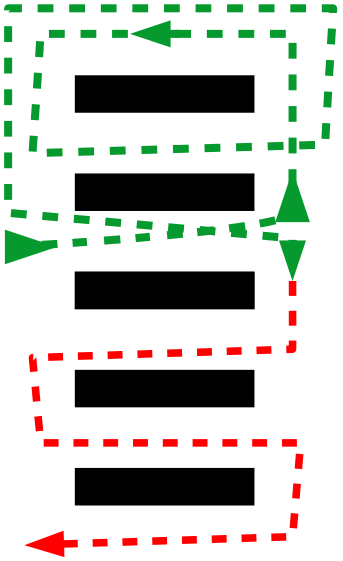
Not efficient; can run slow



Compiler

Delay before running

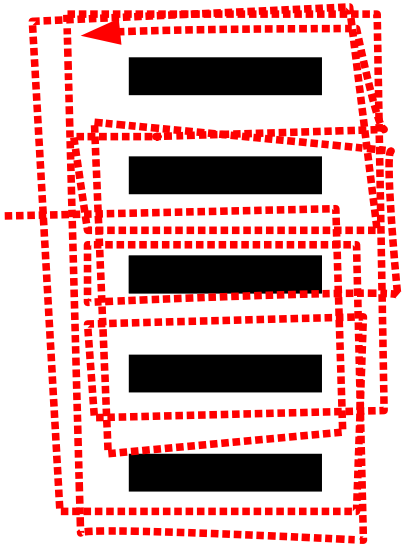
Runs efficiently



Just-in-time

Immediately runs

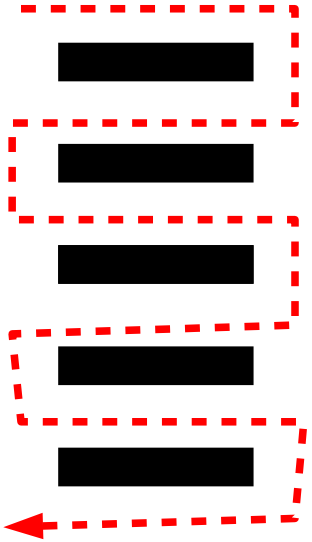
Runs quite efficiently



Interpreter

Immediately runs

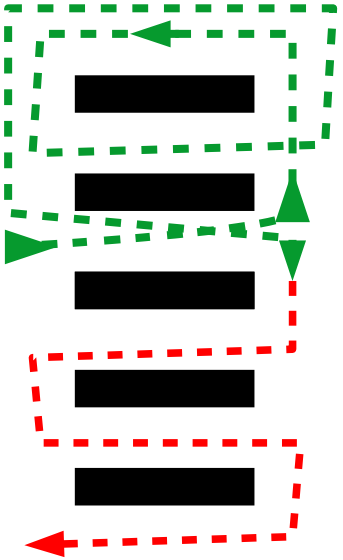
Not efficient; can run slow



Compiler

Delay before running

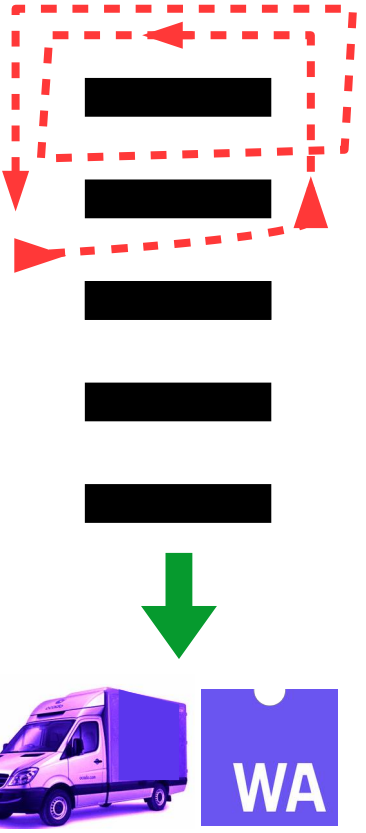
Runs efficiently



Just-in-time

Immediately runs

Runs quite efficiently



WebAssembly

Immediately runs highly efficiently

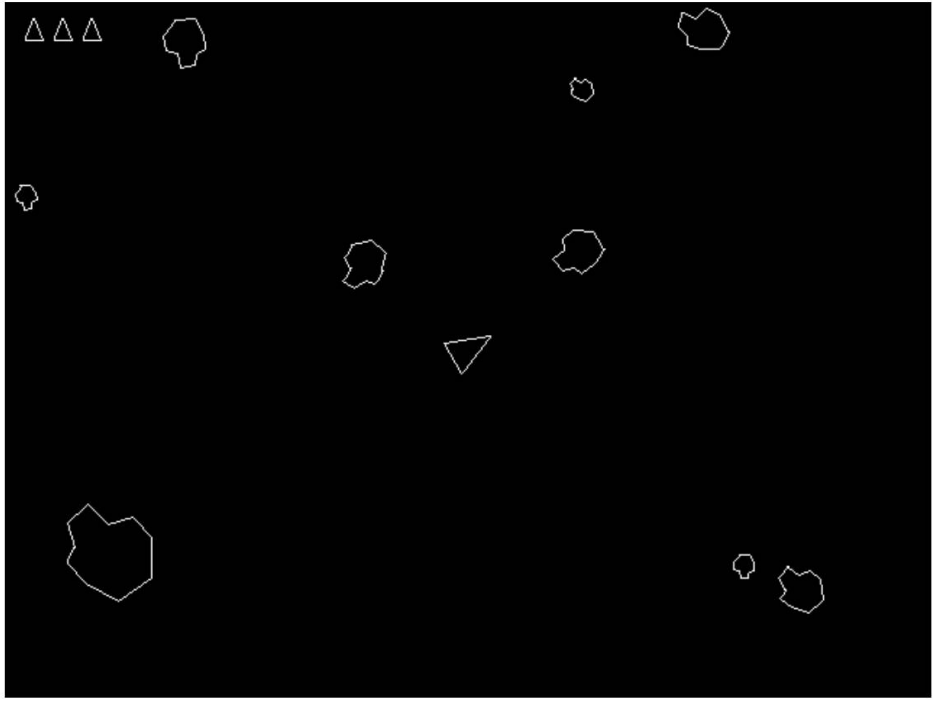
What is WebAssembly ?

Asteroids in WebAssembly

Code on GitHub

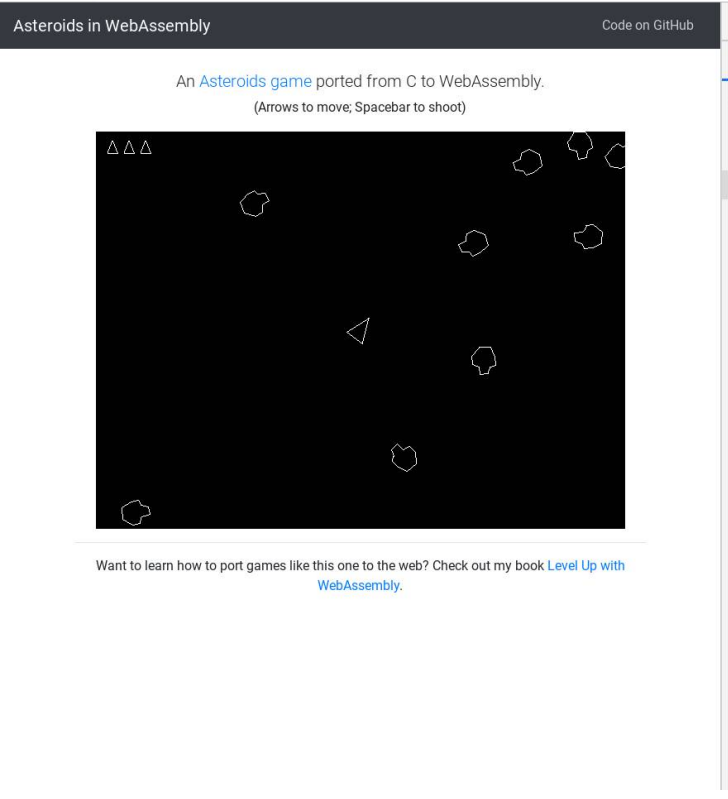
An Asteroids game ported from C to WebAssembly.

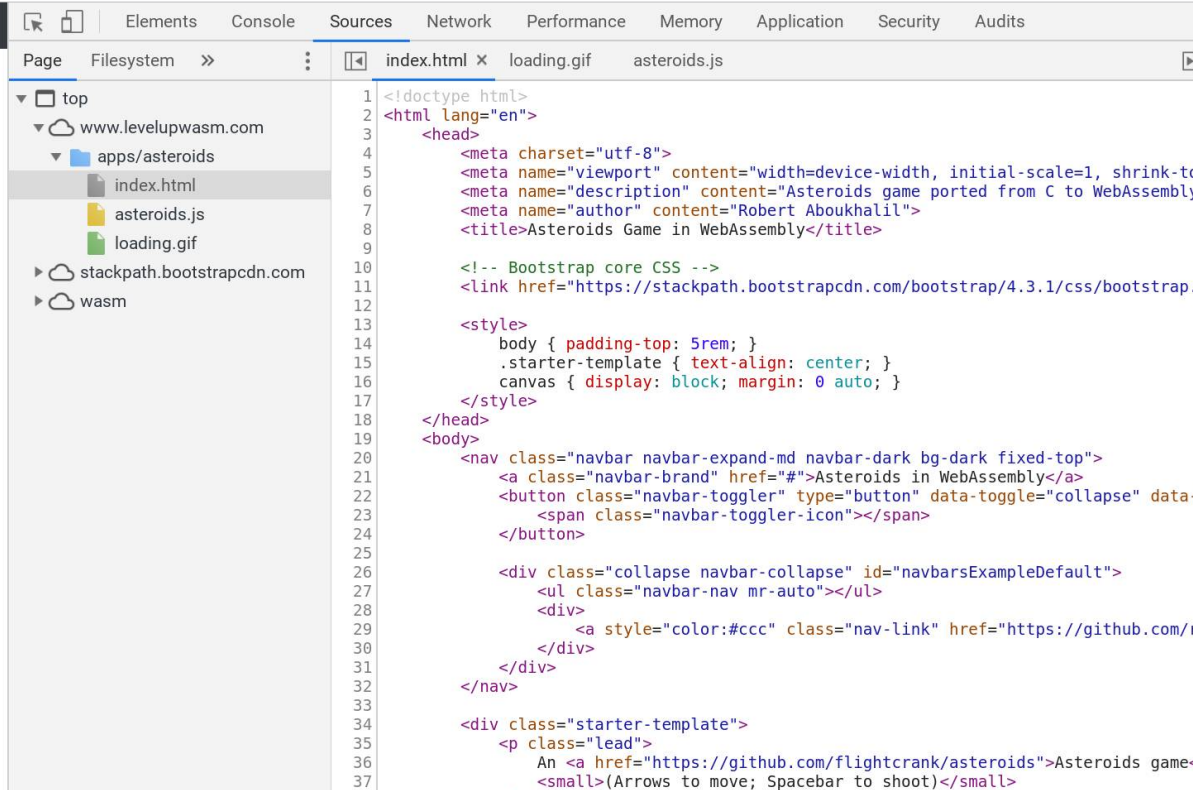
(Arrows to move; Spacebar to shoot)



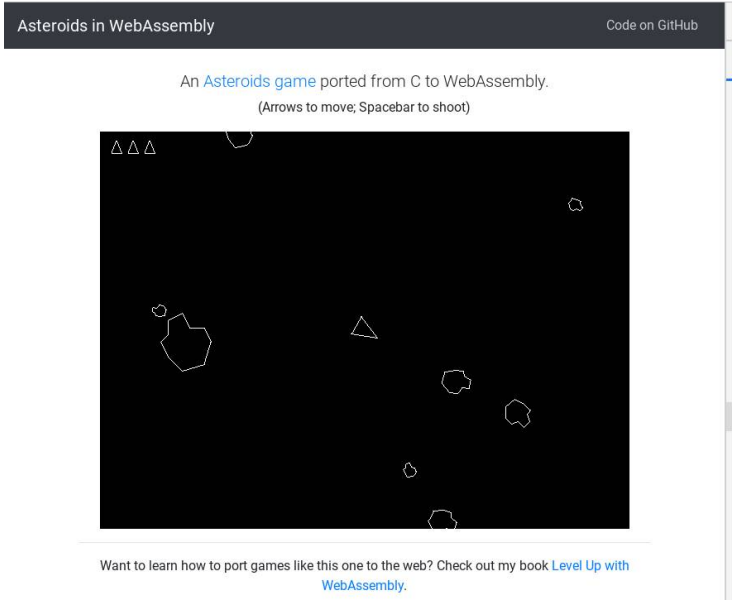
levelupwasm.com
/apps/asteroids

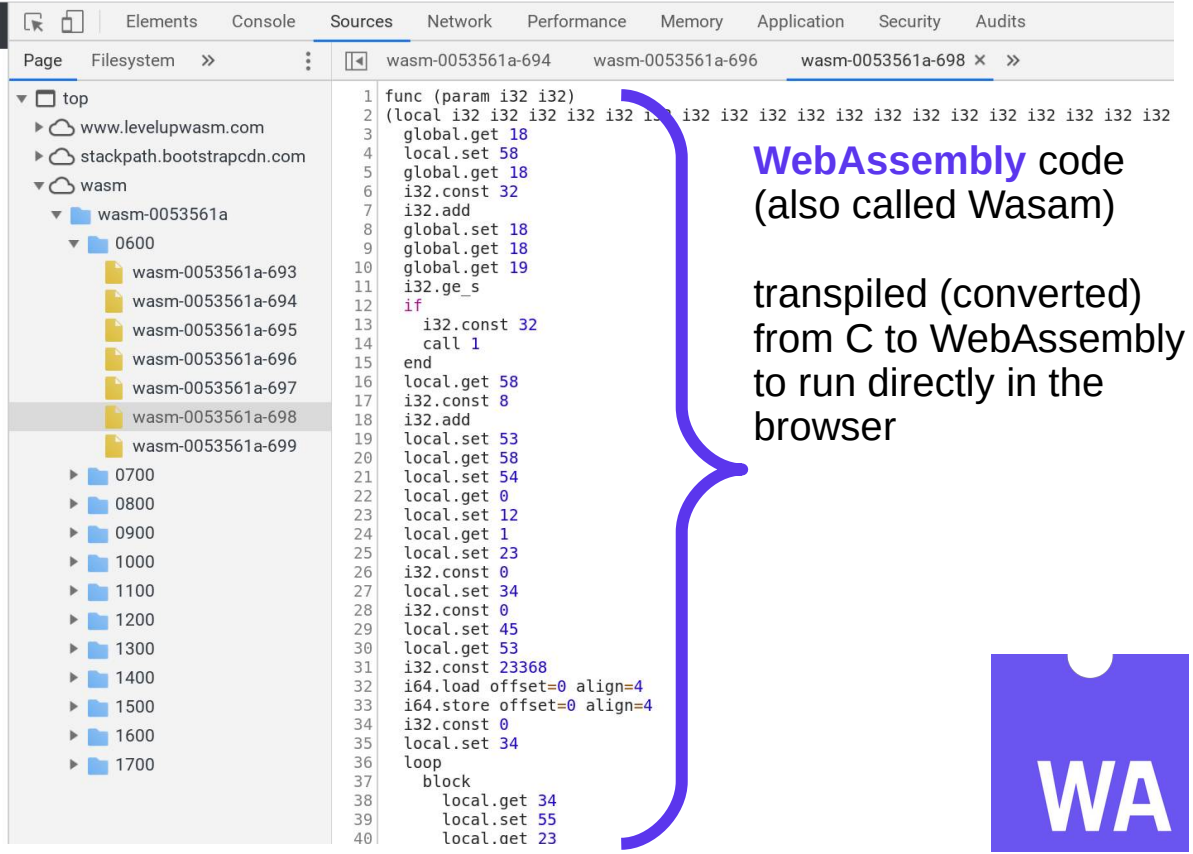
What is WebAssembly ?





What is WebAssembly ?





WebAssembly code (also called Wasam)

transpiled (converted) from C to WebAssembly to run directly in the browser

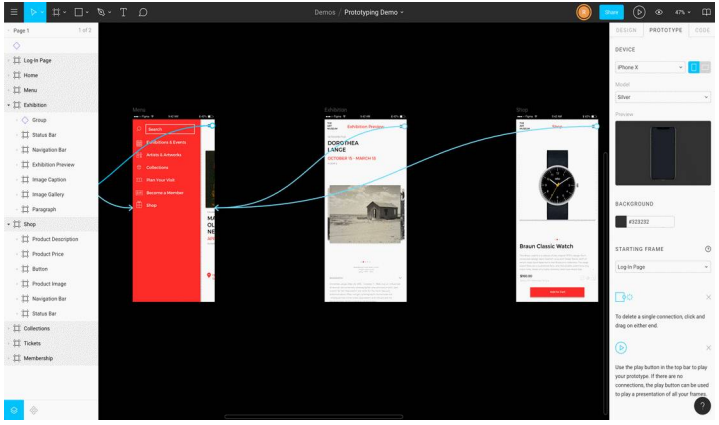
Why is it important?

Why is it important?

Speed

Why is it important?

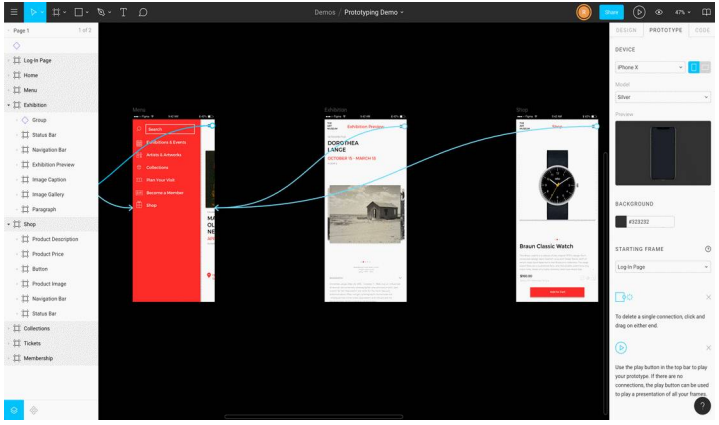
Speed



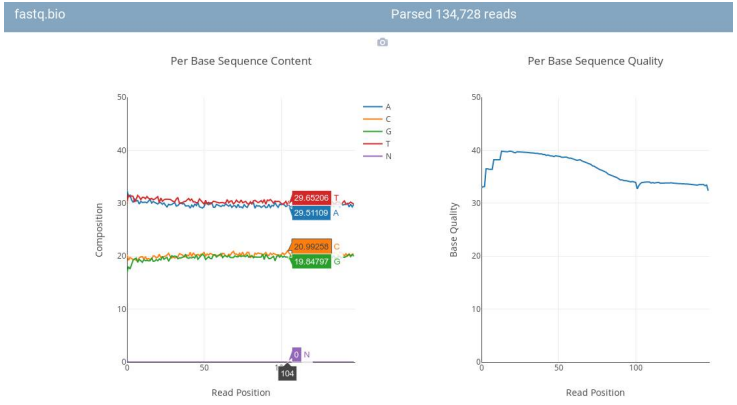
Figma 3X faster

Why is it important?

Speed



Figma 3X faster

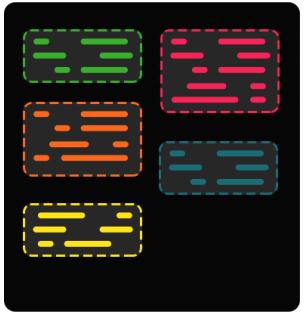


fastq.bio DNA sequencer 20X faster

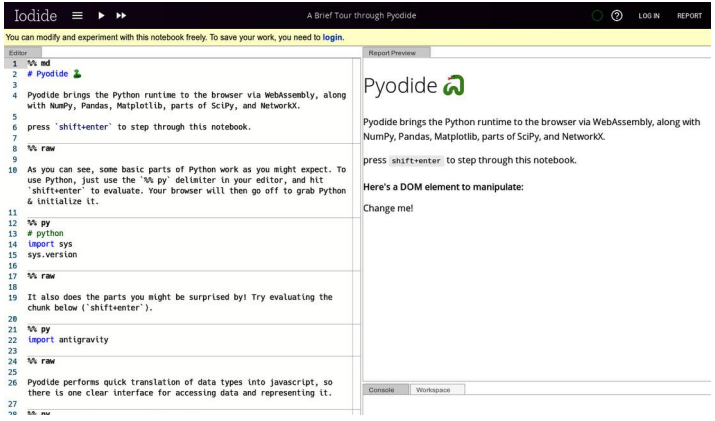
Why is it important?

Run established code

Why is it important?

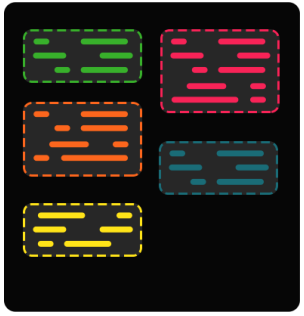


Run established code

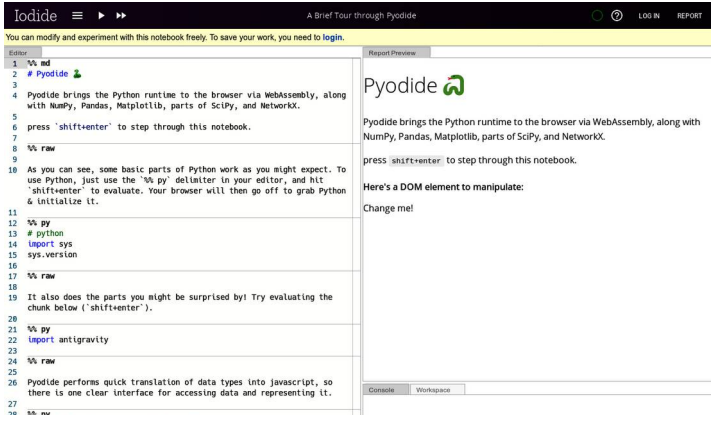


Pyodide: Python scientific on the browser

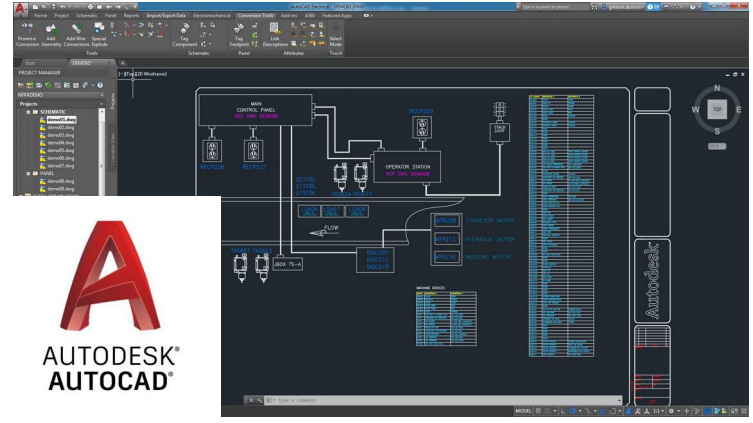
Why is it important?



Run established code



Pyodide: Python scientific on the browser



AutoCAD: web uses identical codebase as desktop

TL;DR

WebAssembly Code is ‘shipped in’ via a binary blob

faster & efficient execution

Run established code not written in JavaScript