Code flow canvas

A generic visual programming system

Who am I?

- Maikel van de Lisdonk
- Freelance software developer focusing on front-end

- Working on code flow canvas for the last 2 years in my spare time

- Strongly believes that an interactive picture says more then a 1000 lines of code...
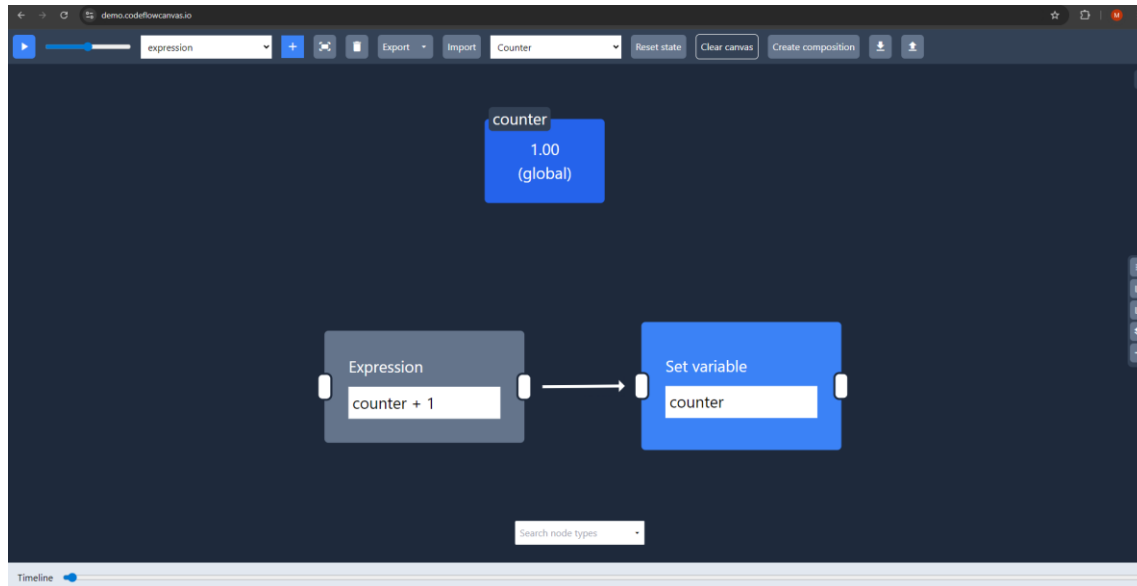
What is code flow canvas?

- Generic visual programming system

- Generic in a sense that:
  - Different visual programming languages with different implementations can be build on top of it
  - Can be used together with and in other code-bases (typescript/js for now)
  - Extendable

- Based on the node and wire model

Goals for code flow canvas

- Visually and interactively explain how software algoritms or application logic transform input to output

- To build data processing pipelines and show how data flows through an application

- Use visual programming in existing code-bases
  - have less visualizing of code and data structures in your head
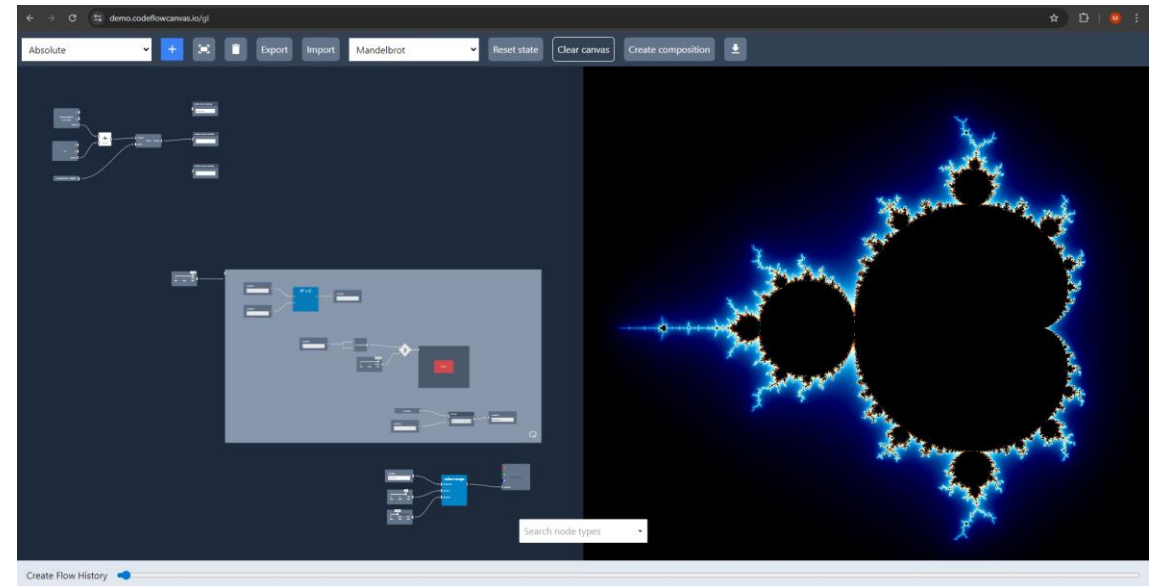 - and see the impact of changes in a code-base … live

Code flow canvas quick first look

2 implementations based on the same infinite canvas editor

Logic computational model in a traditional web environment
All nodes are functions and the engine calls these functions from javascript in the browser

Visual live program environment for building a gpu pixel shader

DEMO

Highlighted functionality in the demo

- Timeline

- Export flow to typescript

- Escape hatches

- Compositions
  - Reusable in a flow
- Replace selected node with compatible node-type

- Insert compatible node-type in selected connection

Links and contact

- Demo.codeflowcanvas.io
- Demo.codeflowcanvas.io/gl

no user-account or login needed,

- Github.com/devhelpr/code-flow-canvas
- Github.com/devhelpr/live-2024/presentation.pdf
- https://youtube.com/@codeflowcanvas

- Contact info:
  - Future of coding slack: @maikel
  - maikel@devhelpr.com

Thanks for watching!