

An aerial photograph of a park area, likely in an urban setting. The park features a large green lawn, numerous trees with dense foliage, and a winding path. In the bottom left corner, there is a playground with a sandpit and some equipment. The park is bordered by city streets with parked cars and buildings. The text "PxWeb2 from a technical point of view" is overlaid in the center of the image.

PxWeb2 from a technical point of view

Kent Mossbäck / System developer at Statistics Sweden



Presentation overview

- Tools used
- Our process
- Some technical choices made
- Performance
- Configuration
- How to get involved



Tools used

- Figma - UX design
- Visual Studio Code - developer
- Github - source repository
- Chromatic - UX design testing
- Cloudflare - software testing



Visual Studio Code



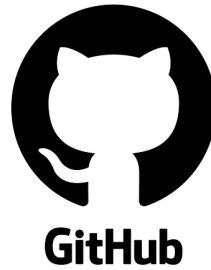
Figma – UX designer



Visual Studio Code

VS Code - developers

Our process



Pull Request
->
Automatic
releases





Chromatic
Storybook
UX tests
















CLOUDFLARE

App
Software tests

Github - Actions

 2 pending reviewers 

 **All checks have passed** [Hide all checks](#)
8 successful checks











	 Chromatic / chromatic (pull_request) Successful in 2m	Required	Details
	 CodeQL / Analyze (javascript-typescript) (dynamic) Successful in 1m	Required	Details
	 Node.js CI Tests / Node CI Tests (20.x) (pull_request) Successful in 45s	Required	Details
	 Cloudflare Pages — Deployed successfully	Required	Details
	 Code scanning results / CodeQL Successful in 2s — No new alerts in code changed by thi...	Required	Details
	 Storybook Publish — 69 stories published.		Details



[PxTools/PxWeb2: The GUI](#)

Chromatic - Builds

PxTools/PxWeb2

Builds		main ▾		
	Build 526 Updated 2h ago • b91195f on main	20 Components	69 Stories	0  Changes
	Build 524 Updated 2h ago • 28247ff on main	20 Components	69 Stories	0  Changes
	Build 521 Updated 3d ago • b30fbb0 on main	20 Components	69 Stories	0  Changes
	Build 519 Updated 3d ago • d9ed021 on main	20 Components	69 Stories	0  Changes
	Build 518 Updated 3d ago • 0b1d059 on main	20 Components	69 Stories	0  Changes



[Builds • PxTools/PxWeb2](#)

Some technical choices made

- React
- Typescript
- Sass
- Storybook
- i18next
- Virtuoso





Performance

- Save state
- Algorithm
- Parallell api calls
- Only fetch data when needed
- Only fetch needed data
- Virtuoso



PxWeb 2.0

Filter

< Hide

Region

290 of 312 selected

Select grouping

Municipalities

▼

Search in list

Select all

☐ 00 Sweden

☐ 01 Stockholm county

☒ 0114 Upplands Väsby

☒ 0115 Vallentuna

☒ 0117 Österåker

☒ 0120 Värmdö

☒ 0123 Järfälla

Marital status

0 of 4 selected

Age

0 of 102 selected

PxWeb 2.0 > Population by region, marital status, age, sex, observations and year

Population by region, observations, year and sex

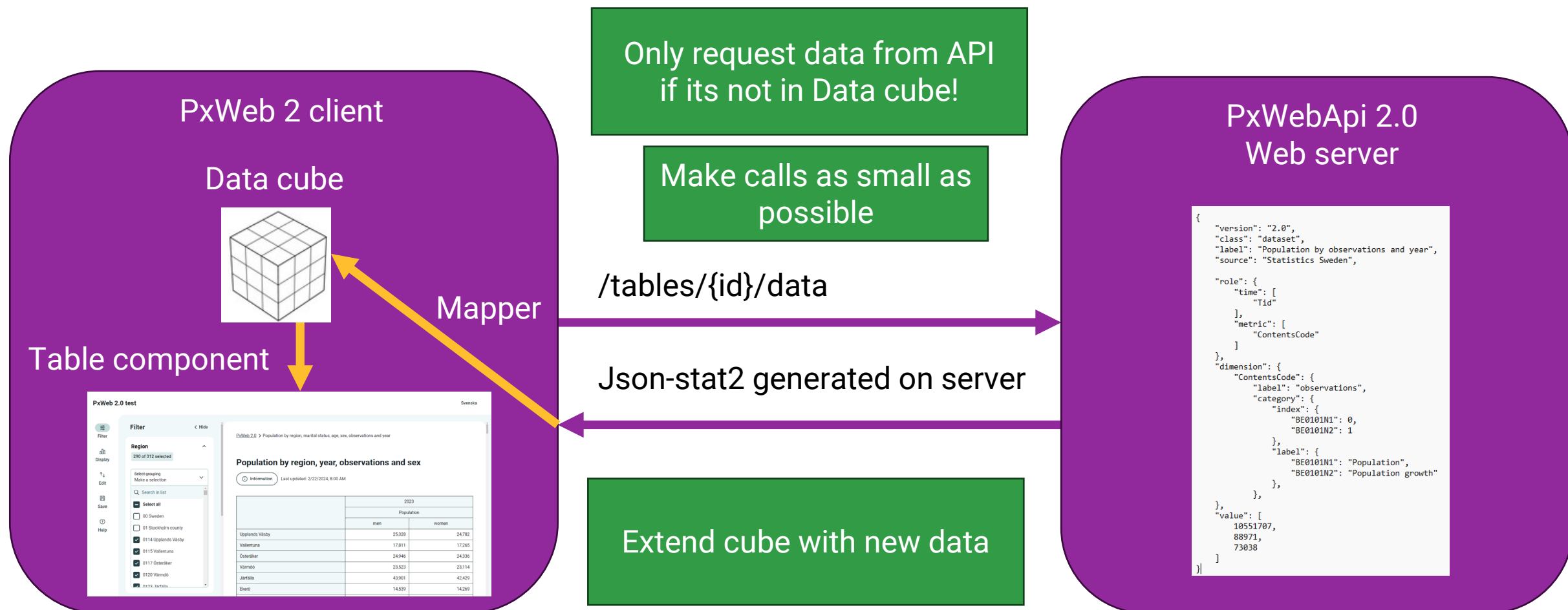
Information

Last updated: 2/22/2024, 8:00 AM

	Population	
	2023	
	Men	
Upplands Väsby	25,328	
Vallentuna	17,811	
Österåker	24,946	
Värmdö	23,523	
Järfälla	43,901	
Ekerö	14,539	
Huddinge	57,713	
Botkyrka	49,146	
Salem	8,701	
Haninge	50,952	
Tyresö	24,582	
Upplands-Bro	16,668	

<https://pxweb2.pages.dev/table/tab638>

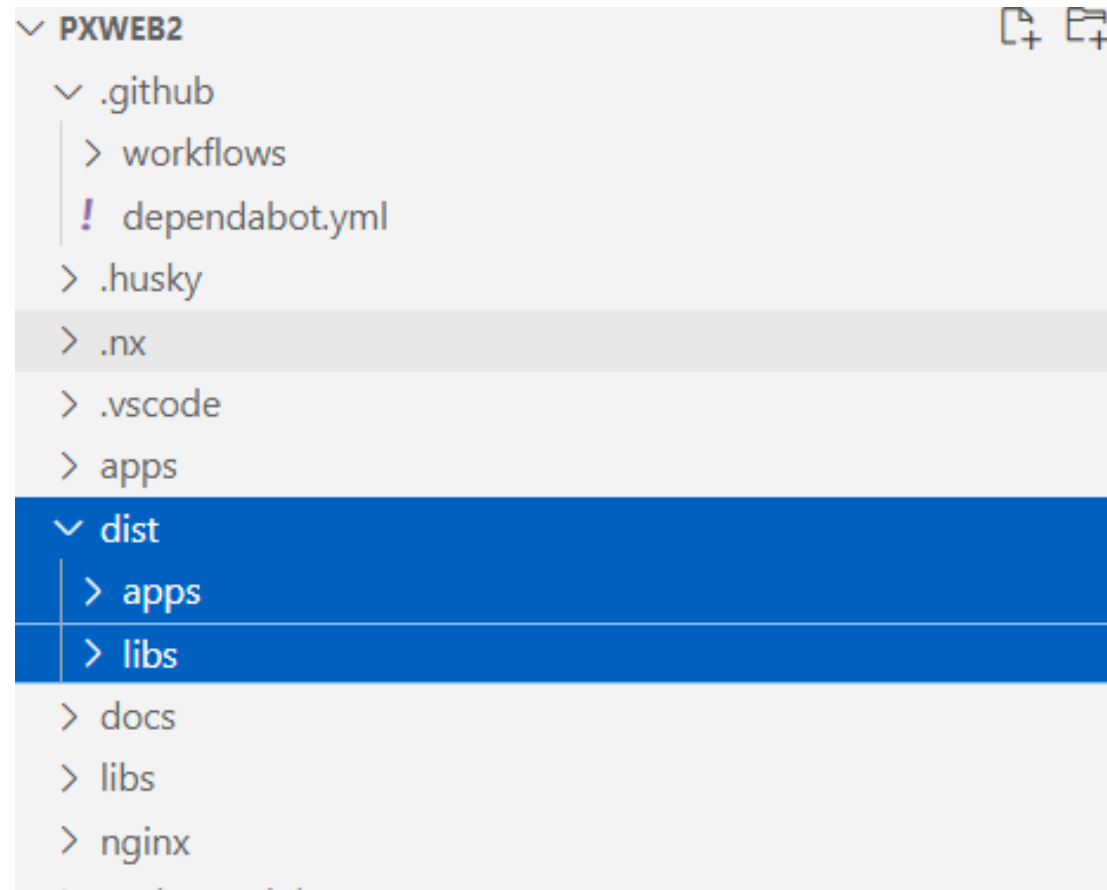
Only make API calls when needed



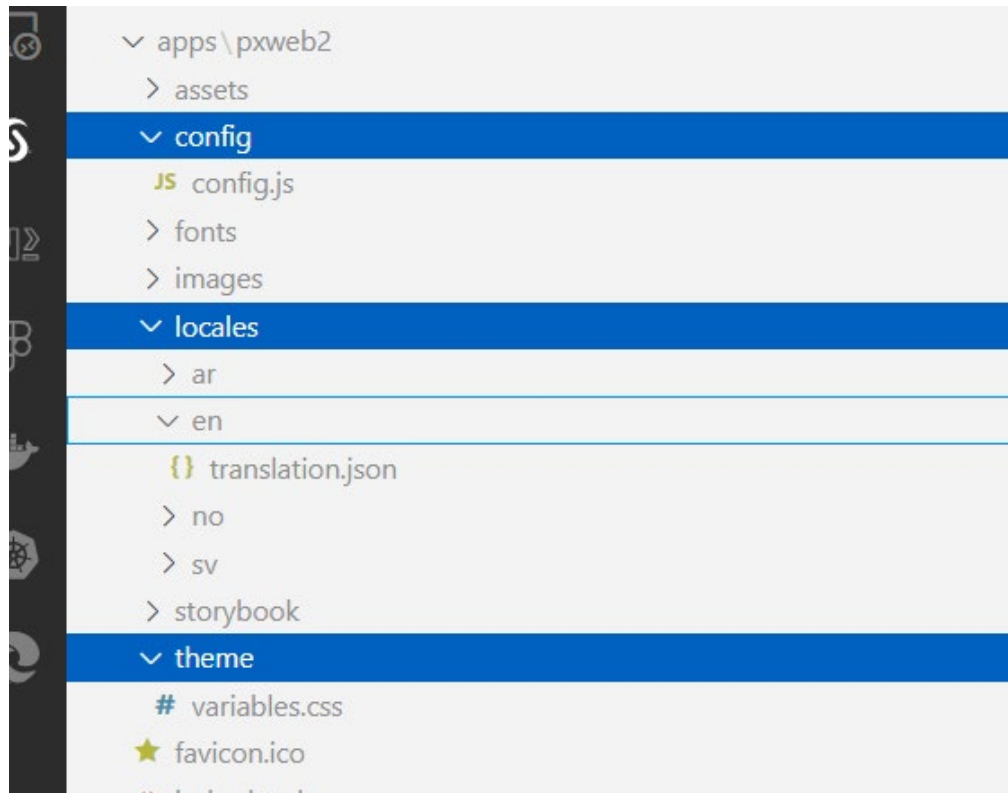
Configurations



The dist folder



The dist folder



config.json

```
JS window.PxWeb2Config = { Untitled-1 ●
1  window.PxWeb2Config = {
2    language: {
3      supportedLanguages: [
4        { shorthand: 'en', languageName: 'English' },
5        { shorthand: 'sv', languageName: 'Svenska' },
6      ],
7      defaultLanguage: 'en',
8      fallbackLanguage: 'en',
9    },
10   apiUrl: "https://api.scb.se/OV0104/v2beta/api/v2",
11 };
12
```

translation.json

```
},
"sidemenu": {
  "hide": "Hide",
  "selection": {
    "title": "Filter",
    "variablebox": {
      "search": {
        "placeholder": "Search in list",
        "label": "Search",
        "arialabelicontext": "Search icon",
        "ariallabelclearbuttontext": "Clear search icon"
      },
    },
    "header": {
      "tag_selected": "{{selected}} of {{total}} selected",
      "tag_mandatory": "Mandatory",
      "alert_no_mandatory_values": "You must select something in the list for the table to be displayed"
    },
    "content": {
      "select": {
        "label": "Select grouping",
        "placeholder": "Make a selection"
      },
      "mixed_checkbox": {
        "select_all": "Select all",
        "deselect_all": "Deselect all"
      },
      "values_list": {
        "aria_label": "List of {{total}} values.",
        "aria_description": "The variable's list of {{total}} total values. To enter the list, press the arrow down key. The Tab key e)"
      }
    }
  }
}
```

variables.css

```
:root {
  --px-border-radius-none: 0;
  --px-border-radius-xxsmall: 0.5px;
  --px-border-radius-xsmall: 2px;
  --px-border-radius-small: 4px;
  --px-border-radius-medium: 8px;
  --px-border-radius-large: 16px;
  --px-border-radius-xlarge: 24px;
  --px-border-radius-full: 9999px;
  --px-color-background-default: #FFFFFF;
  --px-color-background-subtle: #F0F8F9;
  --px-color-base-white: #FFFFFF;
  --px-color-blue-200: #C3E6FE;
  --px-color-bluegray-300: #9BC4C5;
  --px-color-bluegray-700: #2F555B;
  --px-color-bluegray-900: #162327;
  --px-color-surface-default: #FFFFFF;
  --px-color-surface-subtle: #F0F8F9;
  --px-color-surface-moderate: #DBEBEB;
  --px-color-surface-inverted: #274247;
  --px-color-surface-highlight: #ECFEED;
  --px-color-surface-action: #274247;
  --px-color-surface-action-hover: #274247;
  --px-color-surface-action-active: #162327;
  --px-color-surface-action-subtle-hover: #DBEBEB;
  --px-color-surface-action-subtle-active: #C3DCDC;
  --px-color-surface-info-subtle: #D7ECFE;
  --px-color-surface-info-moderate: #C3E6FE;
  --px-color-surface-success-subtle: #DBF5DC;
  --px-color-surface-success-moderate: #B6E8B8;
  --px-color-surface-warning-subtle: #F8F1C0;
```



How to get involved

<https://pxweb2.pages.dev/>

<https://github.com/PxTools/PxWeb2>

<https://github.com/PxTools/PxWebApi>



Time for questions?

