

Gemeente
Amsterdam

Open-sourcing JavaScript at the City of Amsterdam

All Things Open 2019, Raleigh N.C.



Who is this for?



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Roy Derks
@gethackteam

"Open-sourcing" your code involves more work than changing your private repository into a public one. Without documentation it's hard for others to understand and value your code

5:05 AM - Oct 10, 2019

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A little bit about myself first...



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Roy Derks

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City of Amsterdam

React GraphQL Academy

Auth0

SwitchBay.
ELECTRIFY YOUR LIFE



Amsterdam?



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City of Amsterdam

- Since 1275
- Population: 860,000



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Not in the U.S.!



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We’re known for...



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But we also do tech!



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In 2017, approximately ***60,000 people*** *were employed by more than* ***1,000 technology companies*** *in Amsterdam, representing* ***11% of the total Amsterdam labour market.***

STARTUP AMSTERDAM

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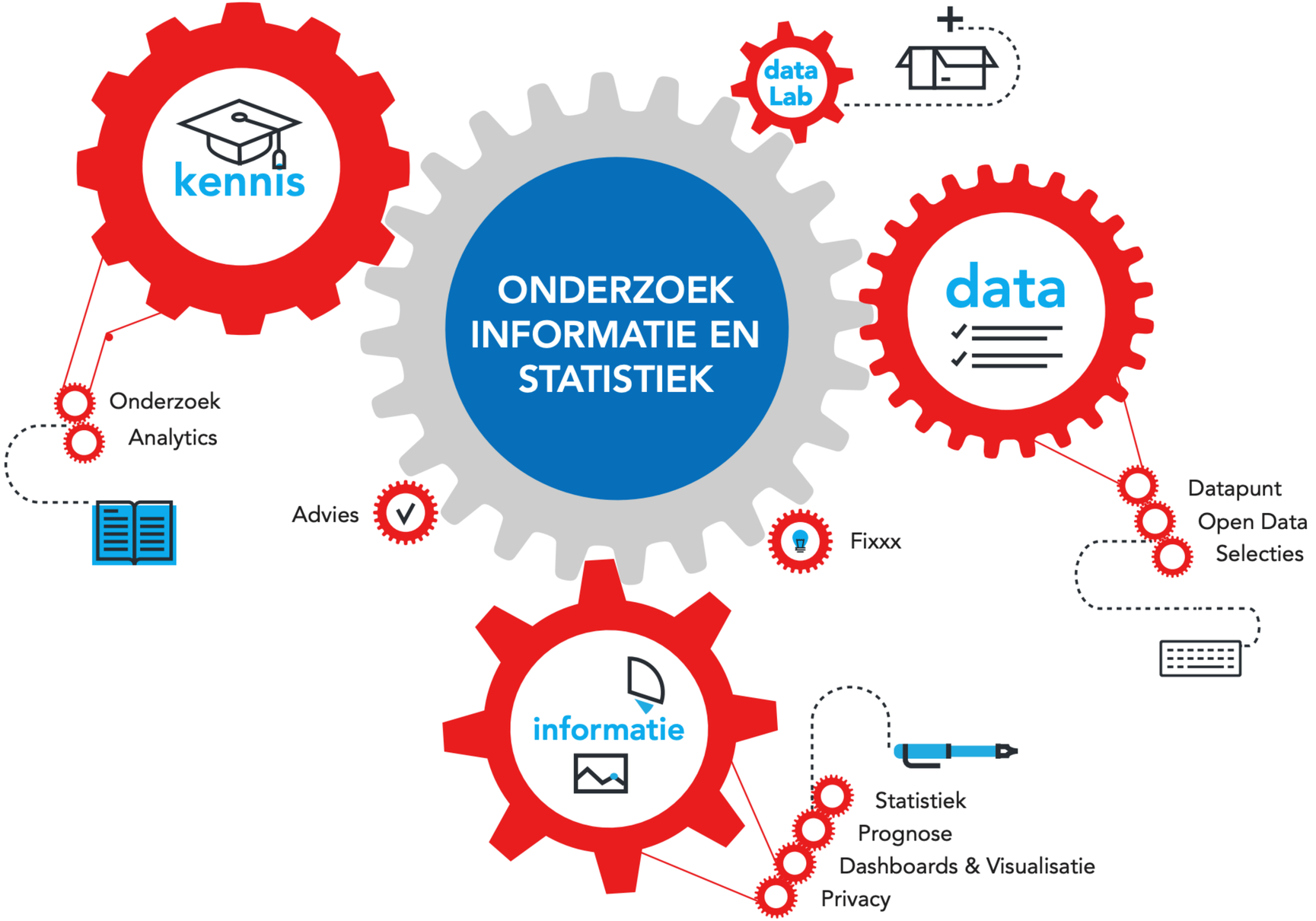
STARTUP AMSTERDAM

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Even at our local government

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- “DataPunt”
- Since 2015
- 85 people strong
- 8 scrum teams

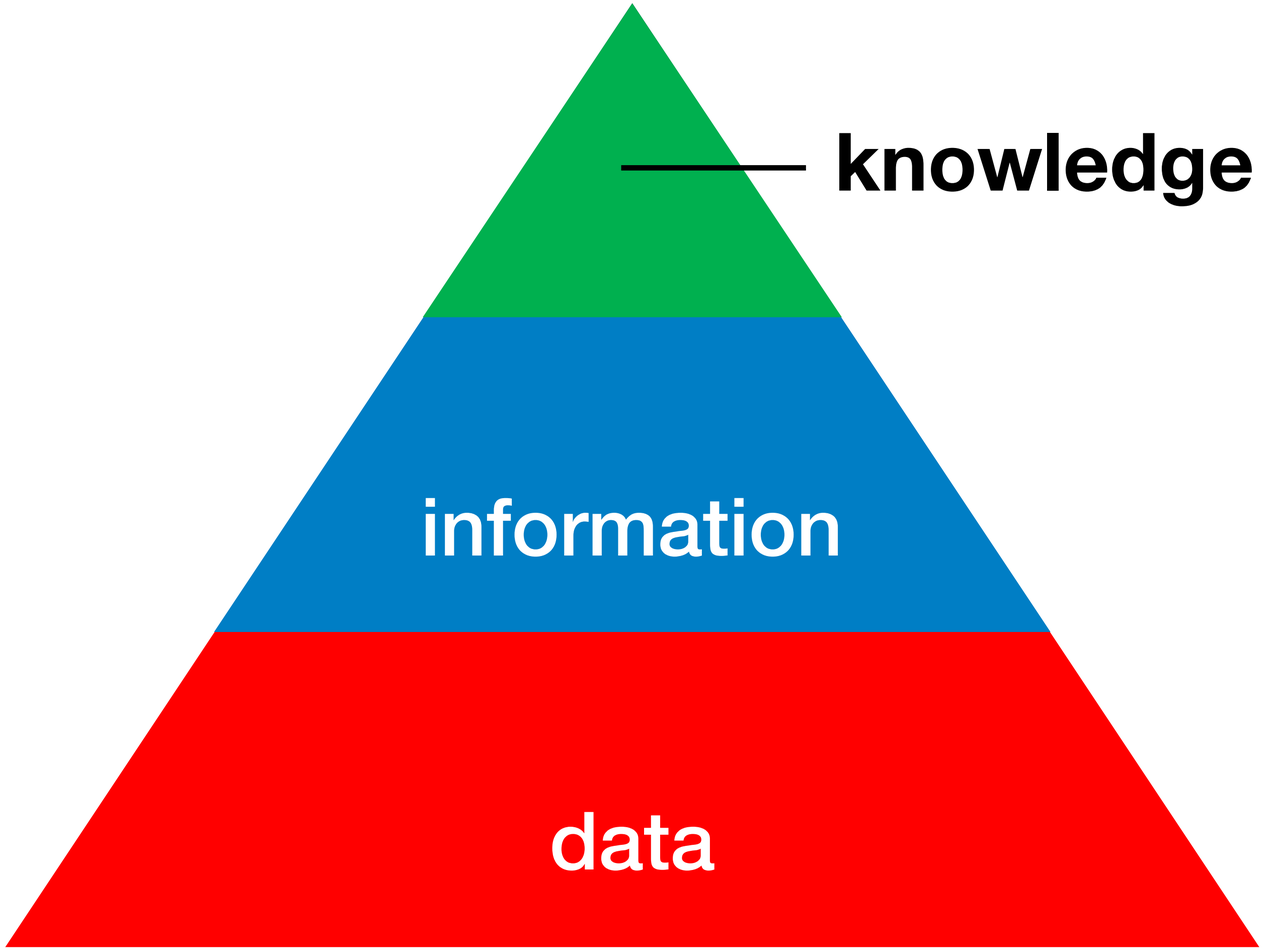
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We're developing projects for
civil servants, **researchers**,
and **civilians**

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Or based on problems the city is facing



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How to solve this?



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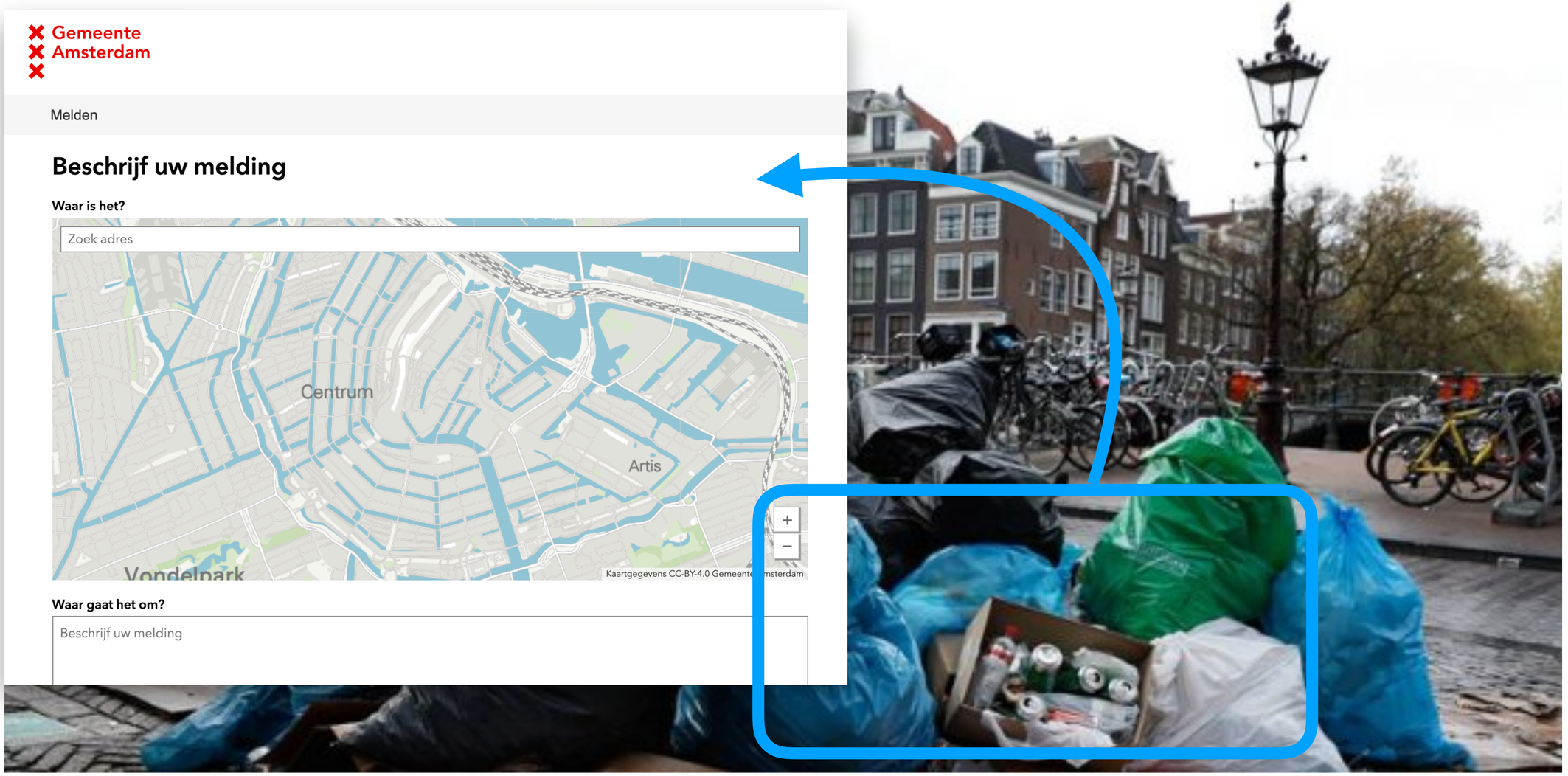


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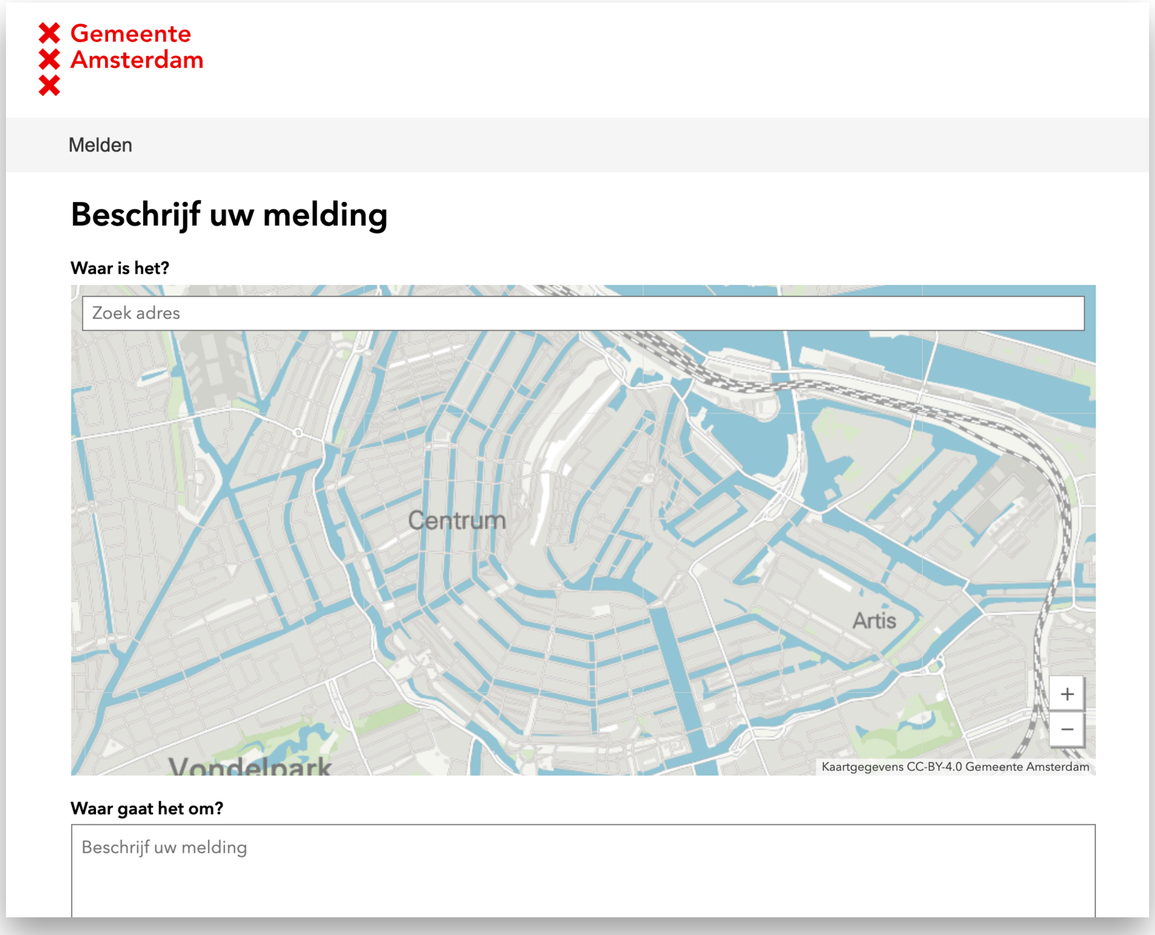


But also technology 👨‍💻

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“Signalen”

- **> 200,000 alerts** a year
- Serves **± 800 civil-servants**

JS python

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And everything is open!



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Why?

- Collaboration
- Reusability
- Transparency
- …

Find out more at **https://amsterdam.github.io**

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Also, we follow European guidelines for open standards



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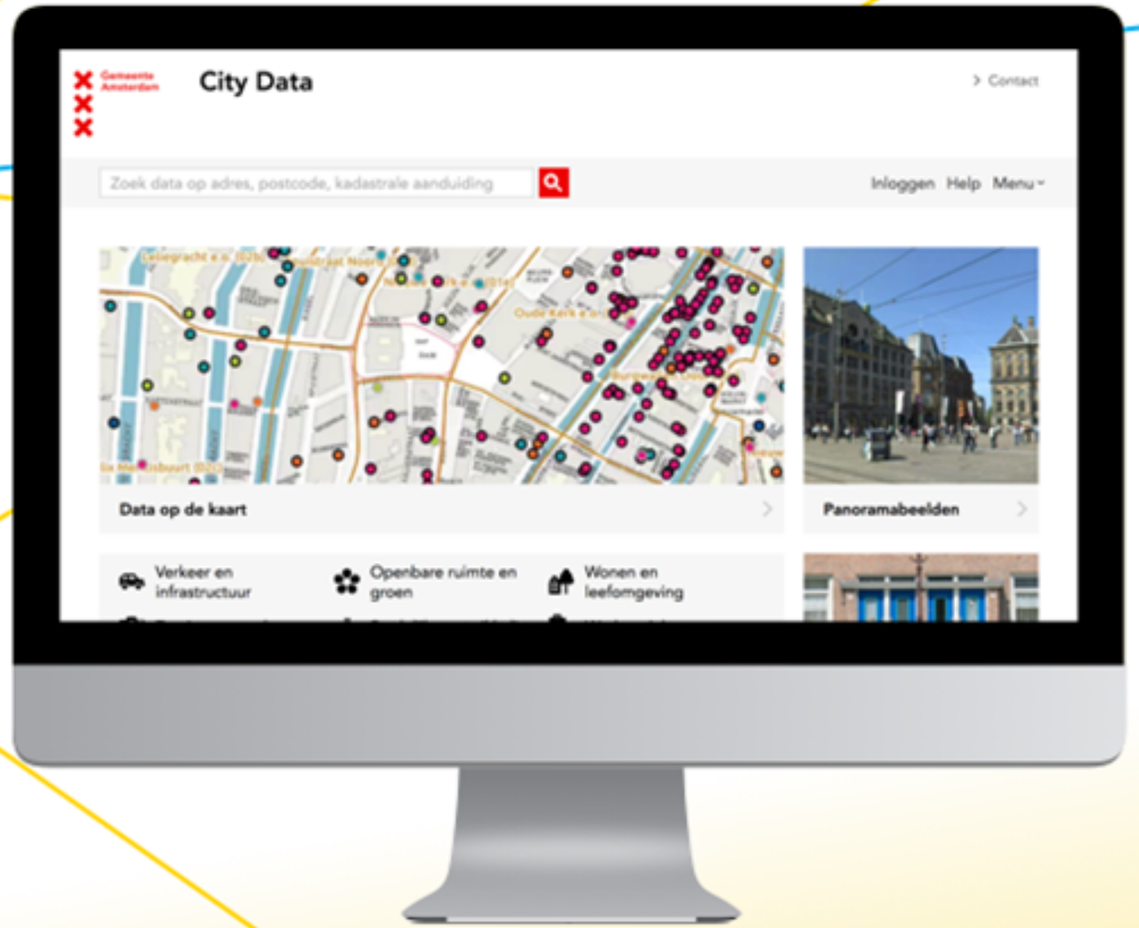


What I’m working on:



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City Data



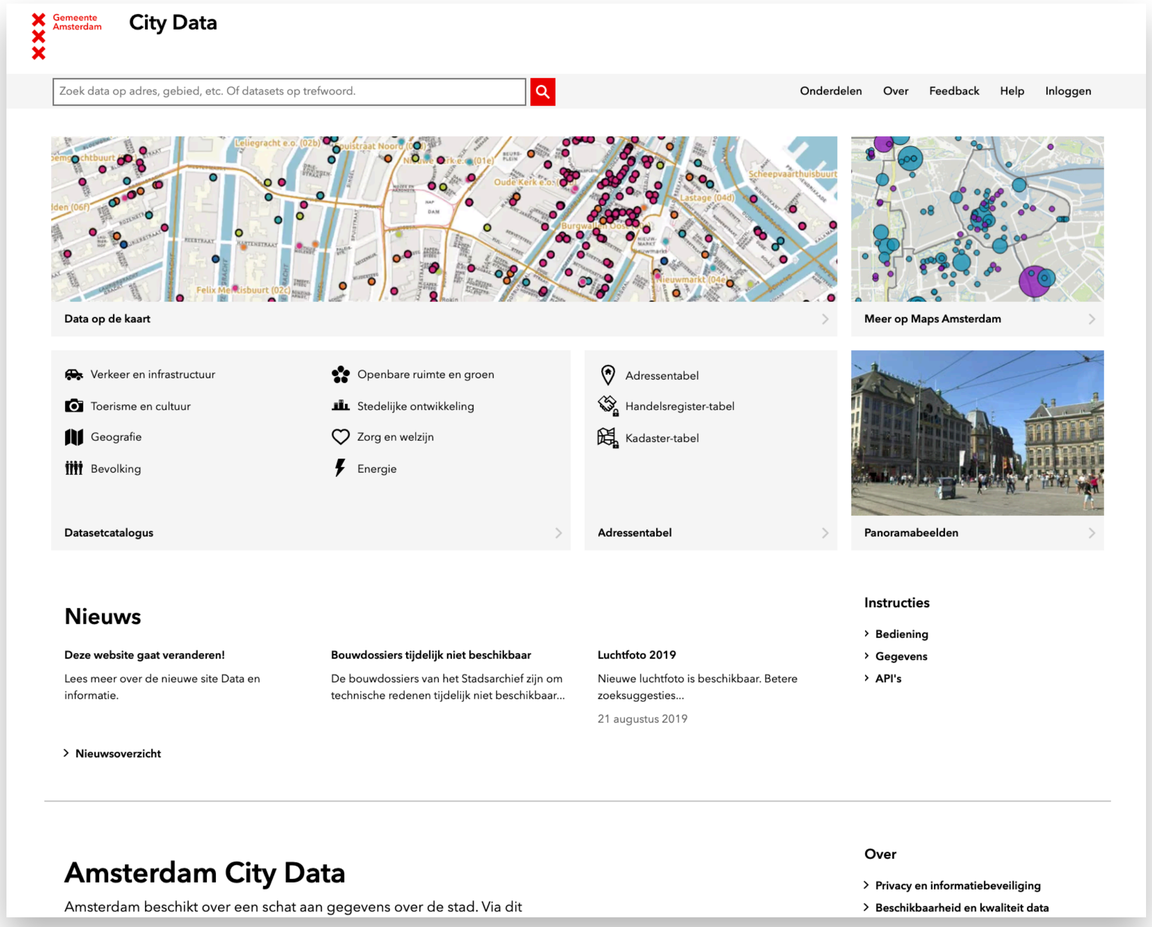
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Portal that combines (almost) all open data of the city



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“City Data / Atlas”

- **> 65,000 views** a month
- **> 17,000 visitors** a month
- Incl. **± 2,000 civil-servants**

JS python

We’re using the **over 35 APIs** we also open-sourced!

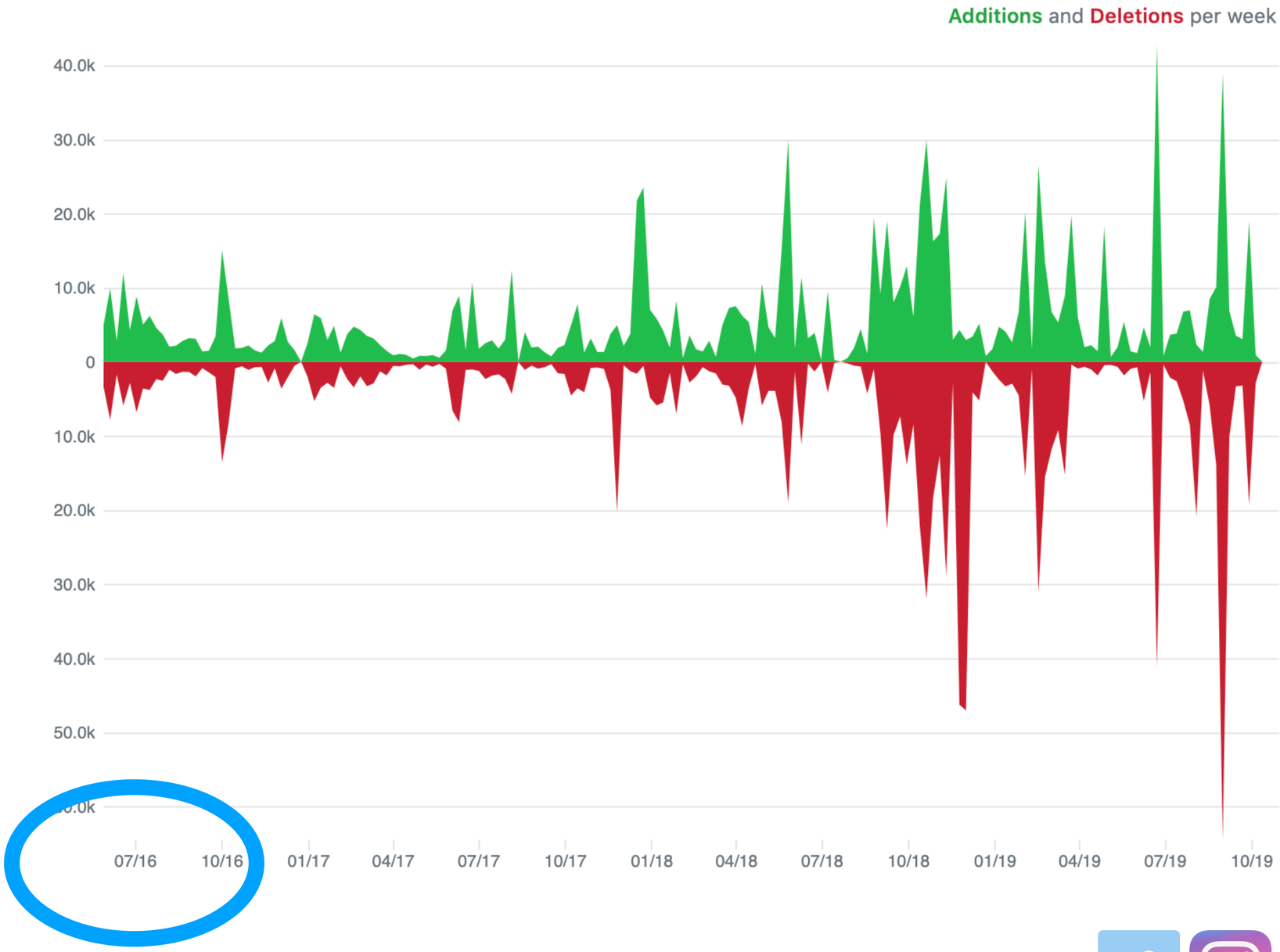
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It has a long history



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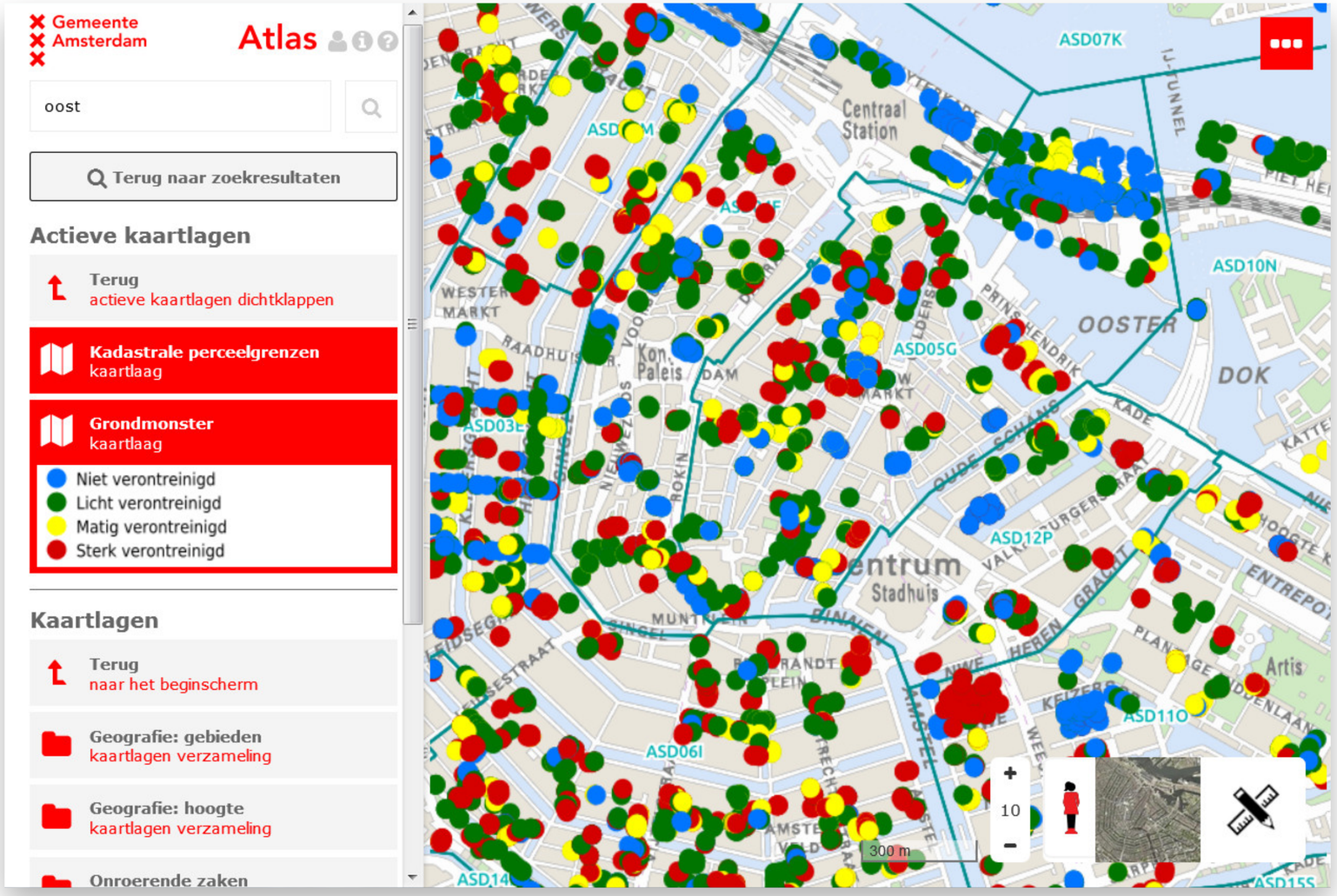
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And it looked like this:

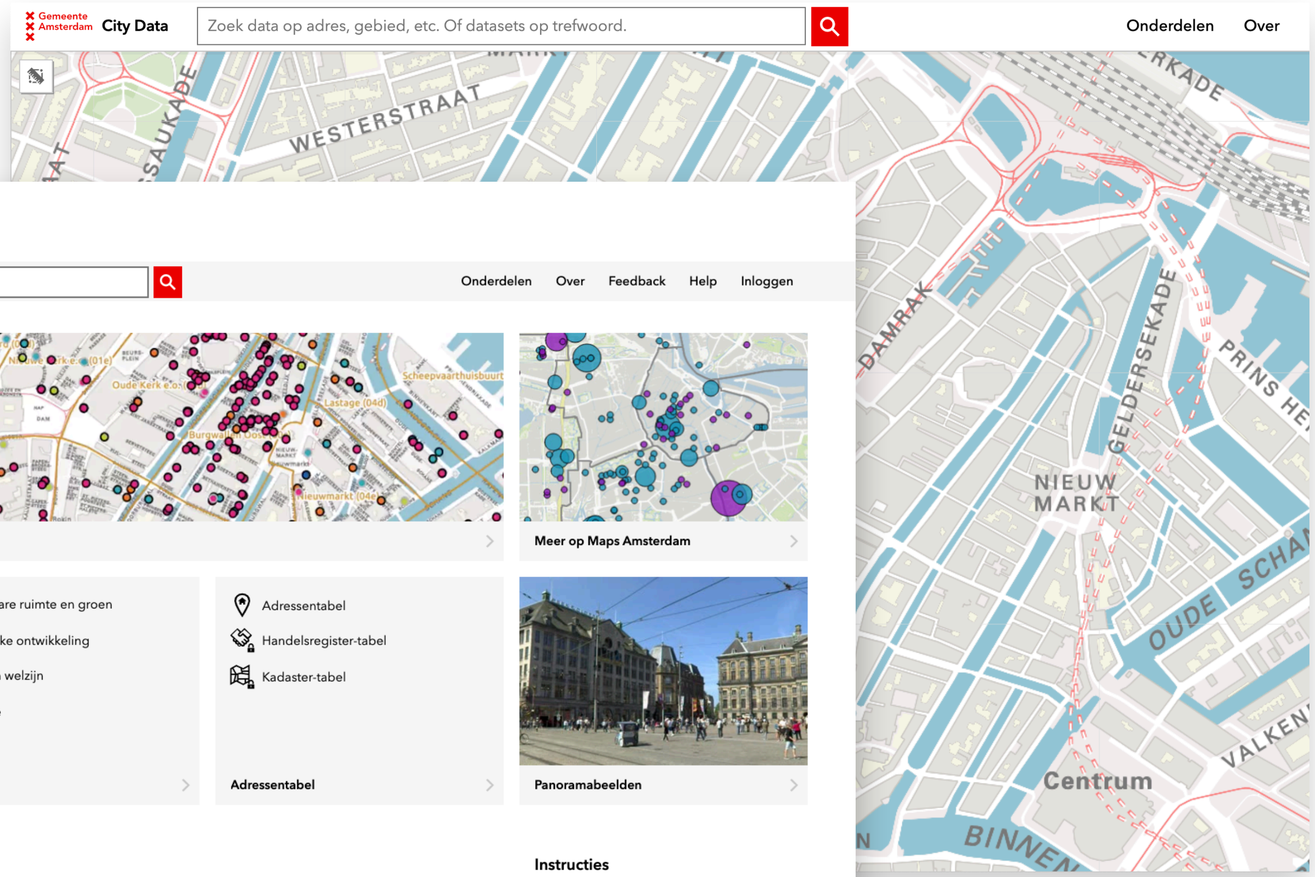


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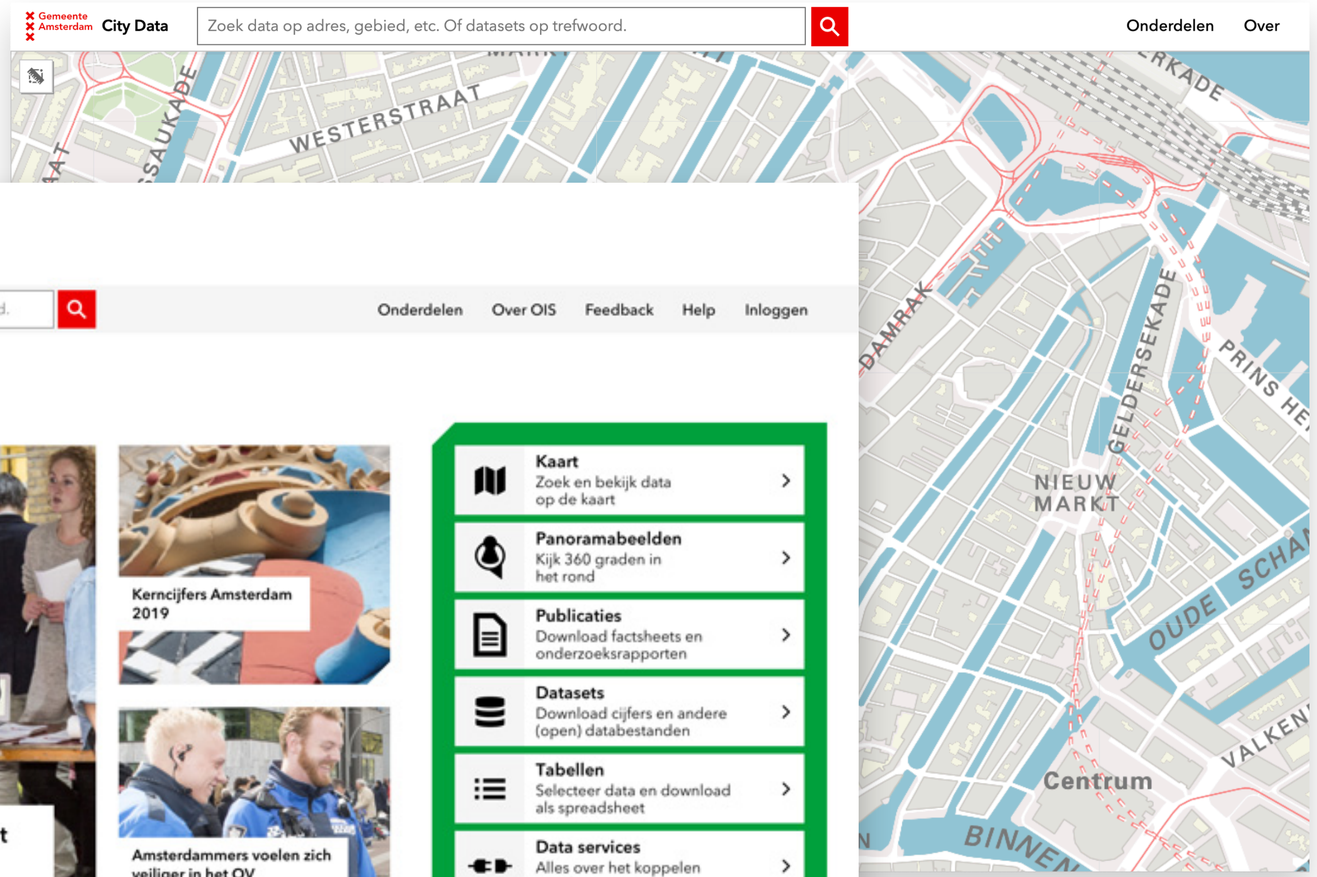
First version

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Current

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Soon

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Improving the application's reusability, because:



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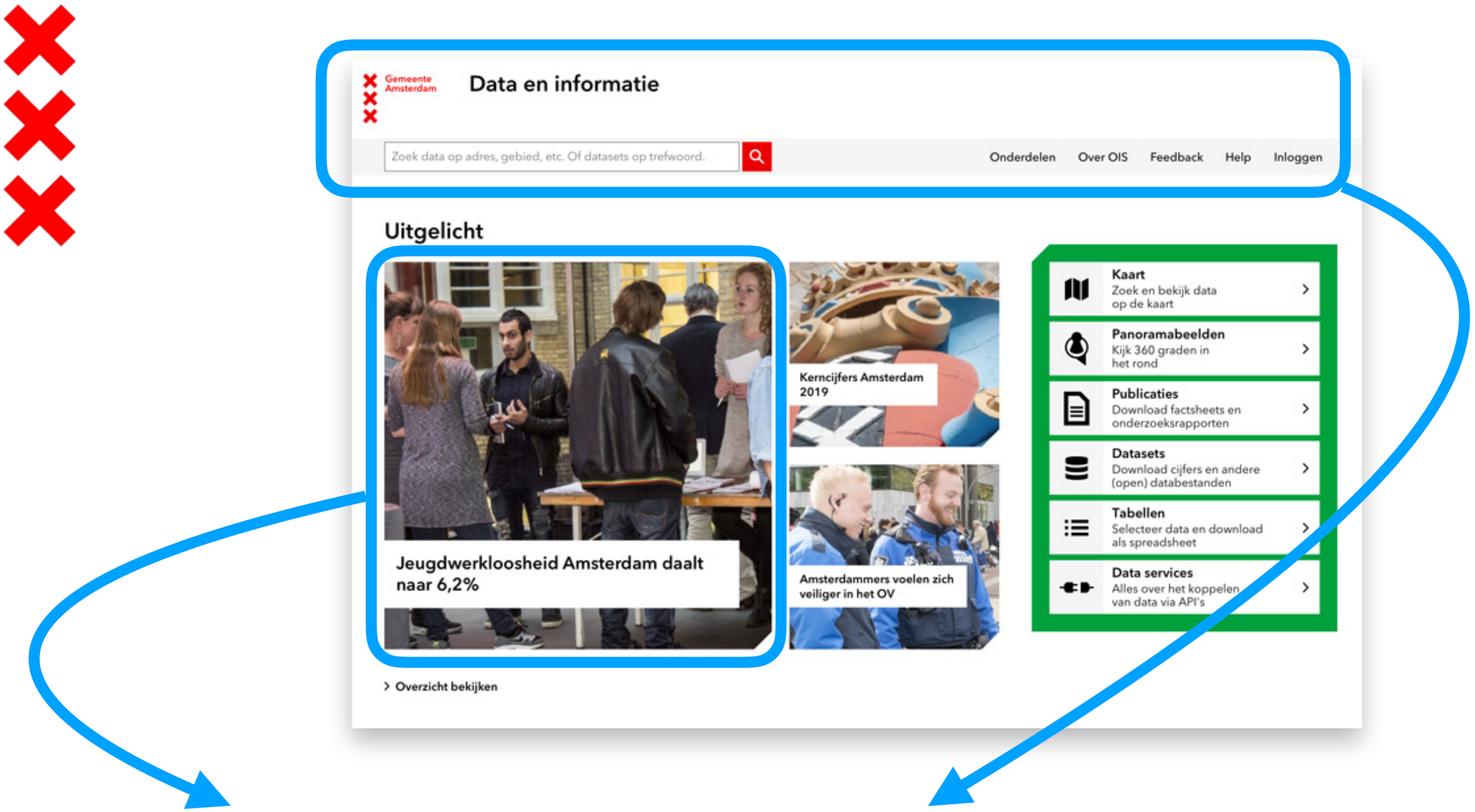
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How are we doing this?



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Abstracting UI and logic

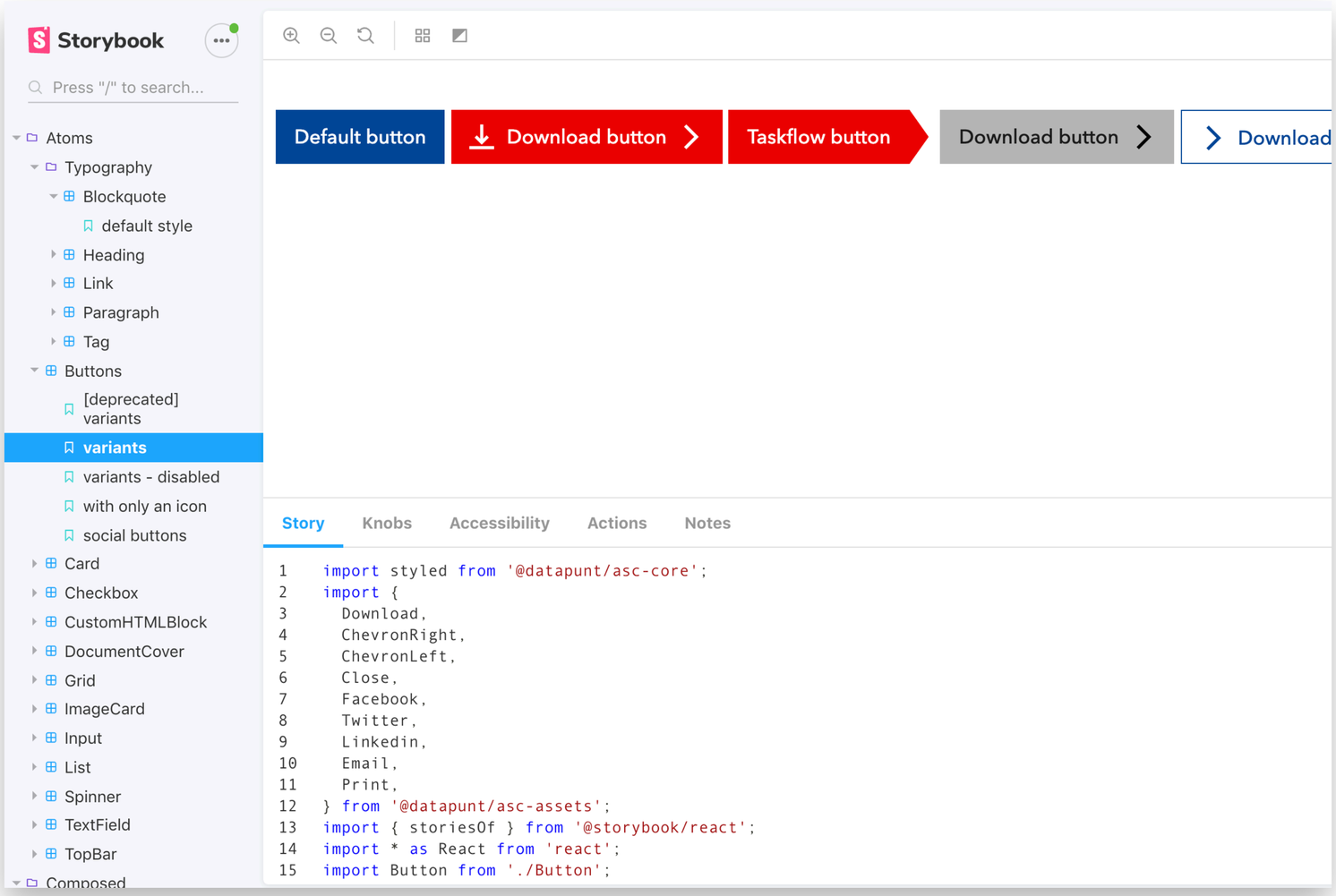
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By creating a UI library



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UI library

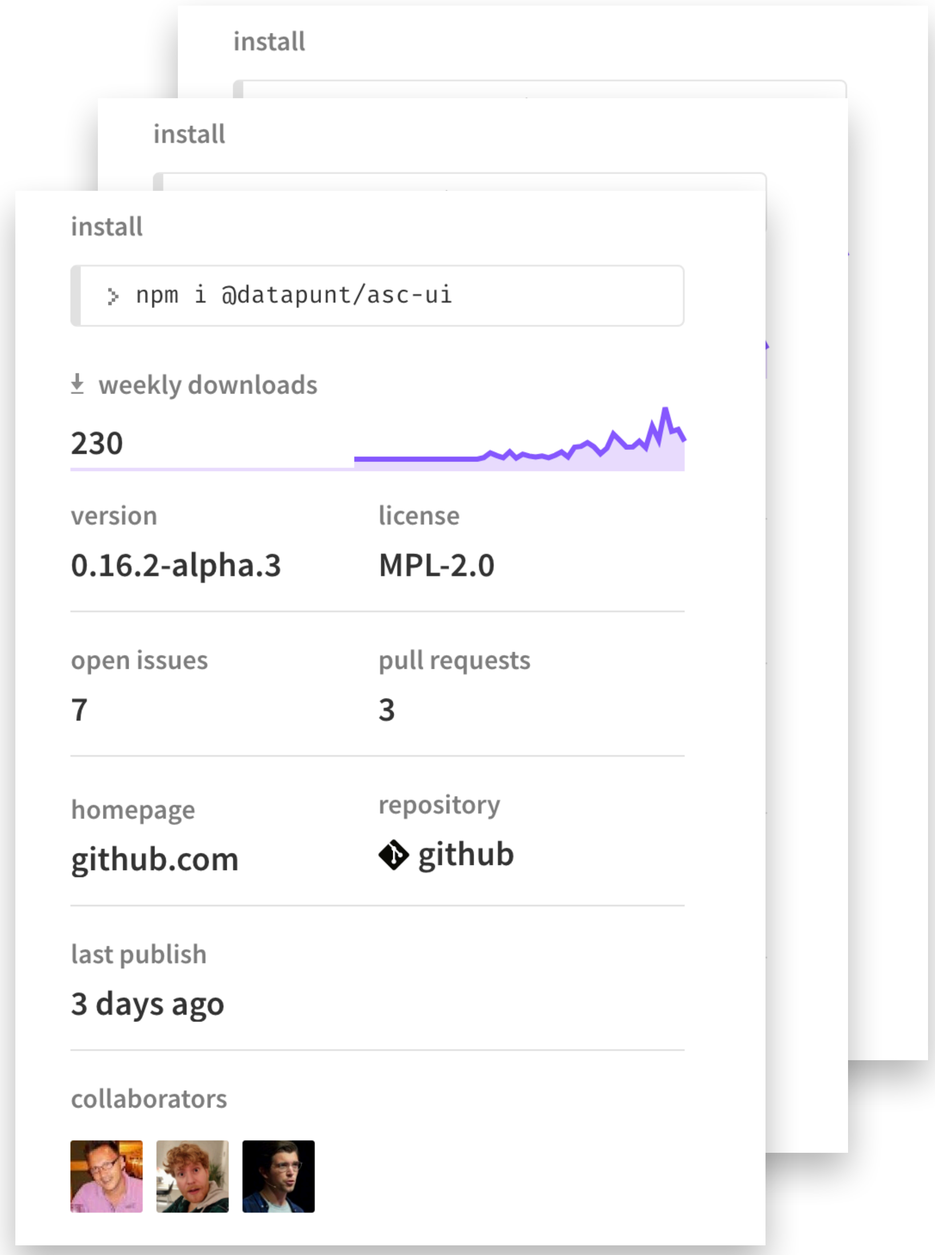
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That was actually our first npm package 🎉




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“Amsterdam Styled Components”

- Monorepo (3 packages)
- Used by all new projects in our department

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However, it's challenging to get the entire city on board



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1. Every project setup is different
2. The Design System is still in development
3. Some projects are created externally



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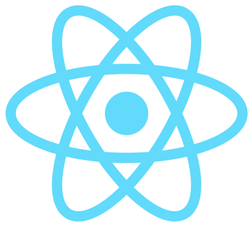
Gemeente Amsterdam

Amsterdam

Home of the Open Source code of the City of Amsterdam

https://api.data.amsterdam.nl

Repositories 229 | Packages | People 83










+ many more



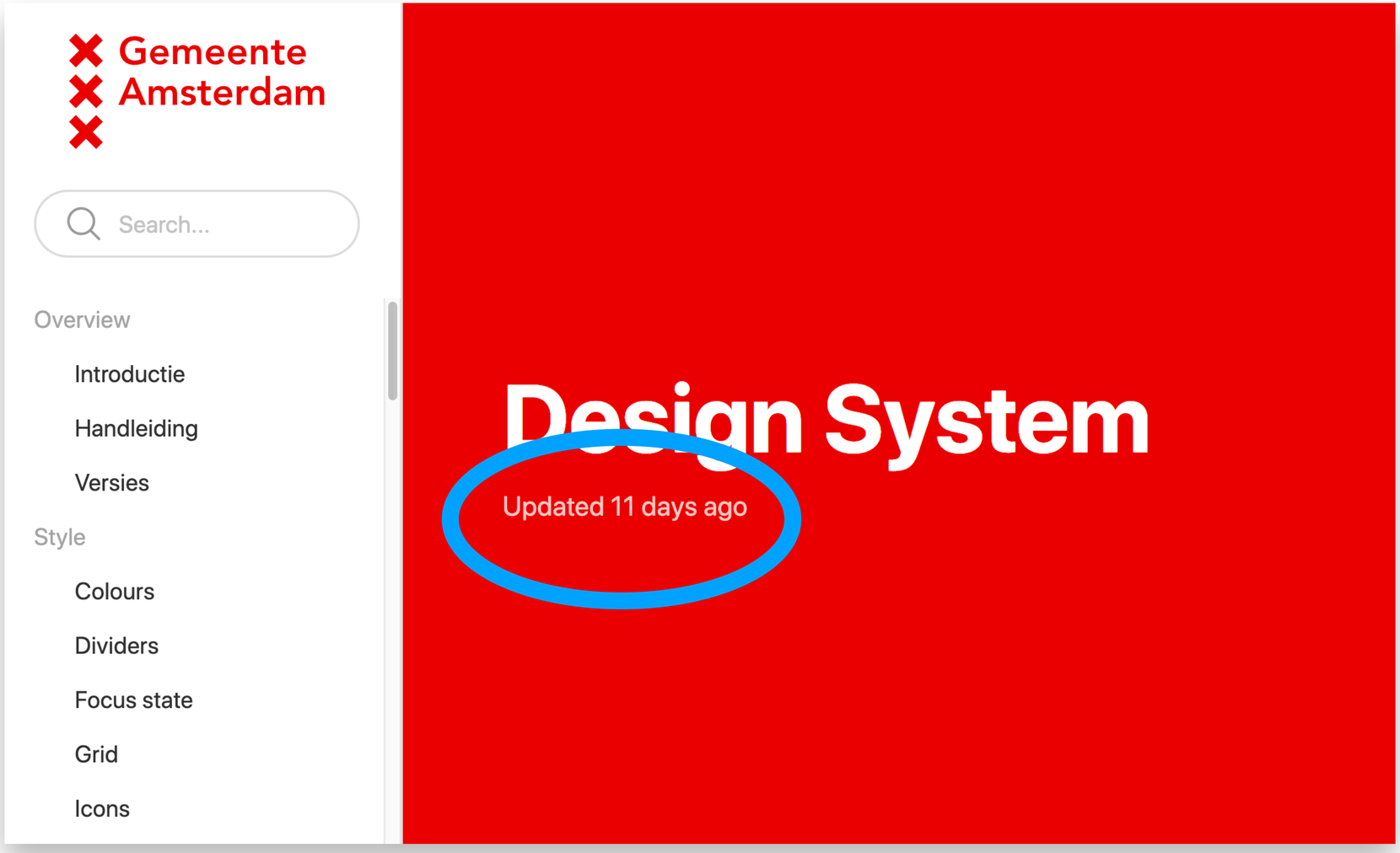

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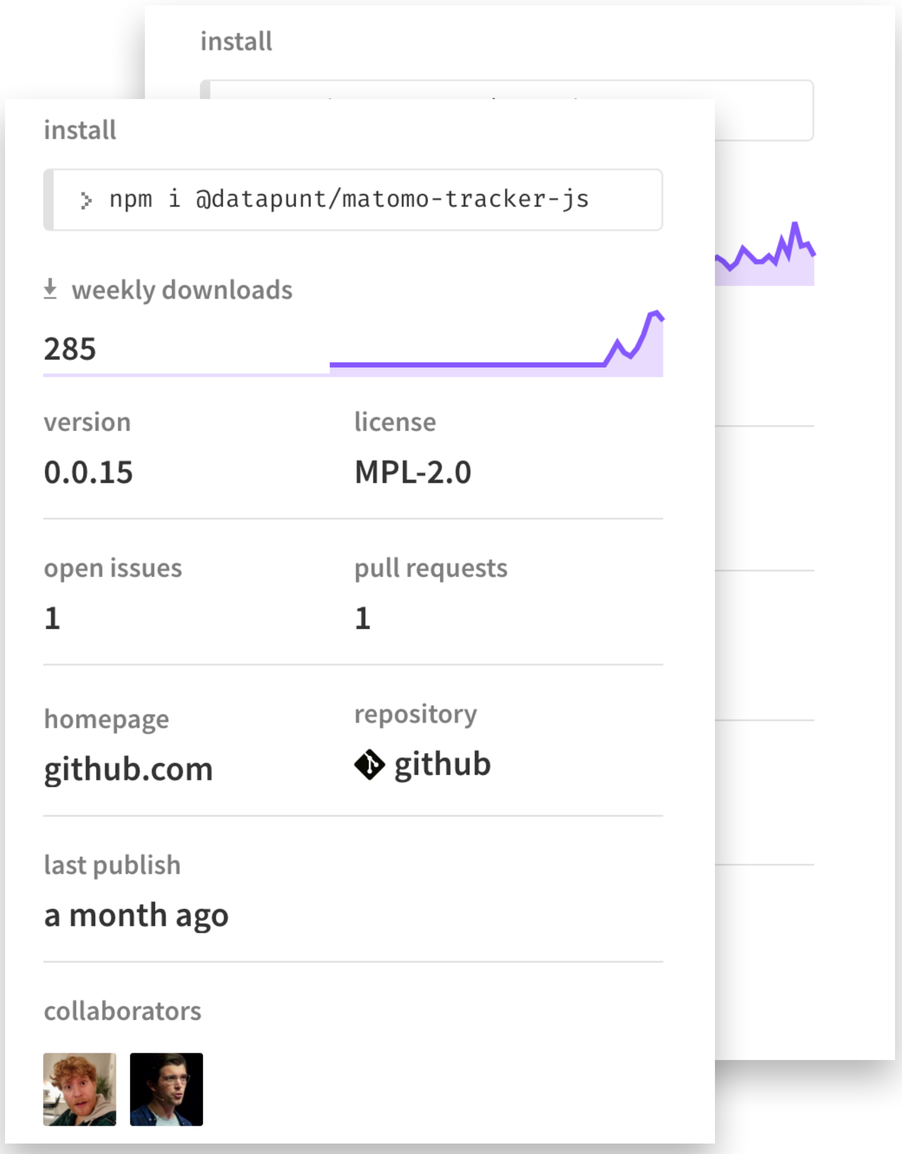
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We also separated our analytics logic




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“Matomo Tracker”

- Monorepo (2 packages)
- Used by all new projects in our department

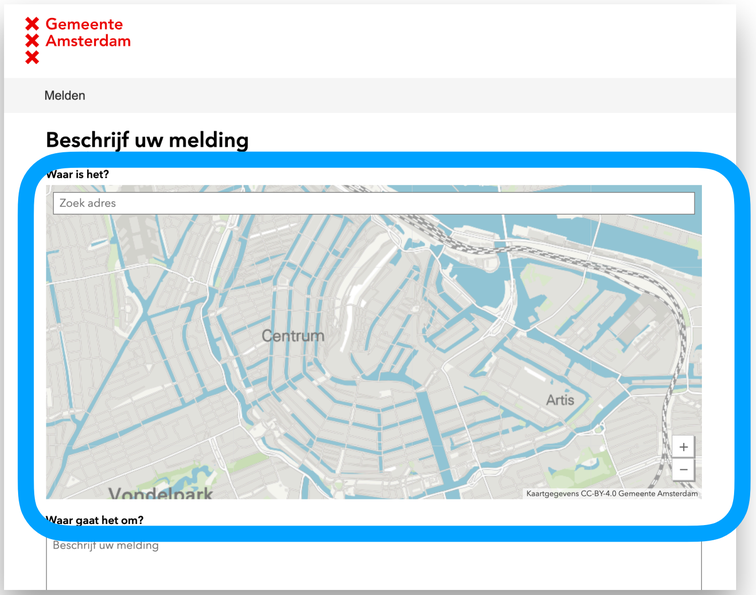
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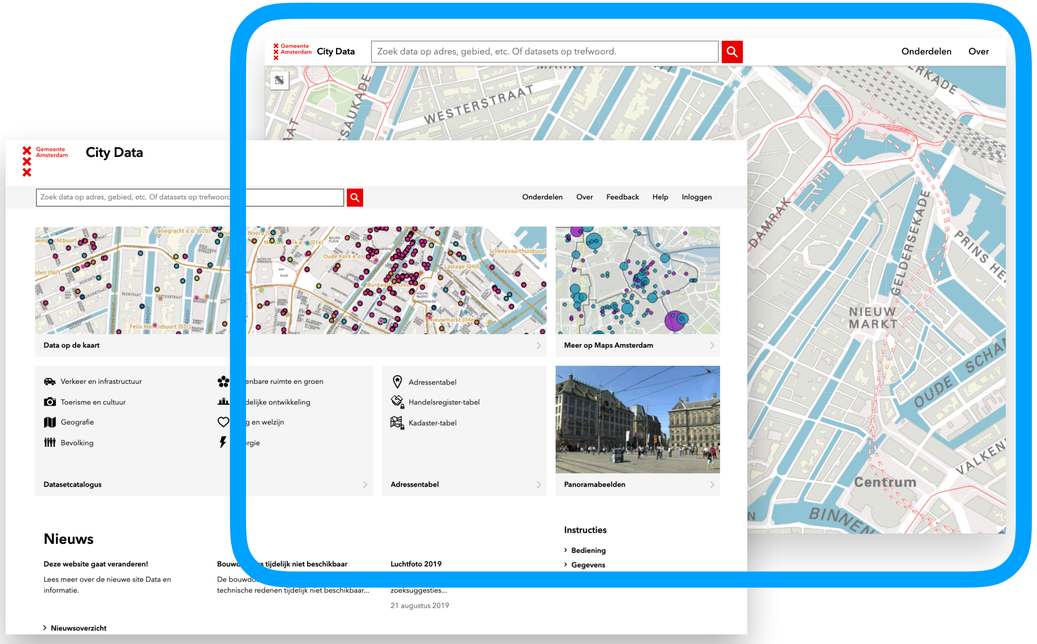


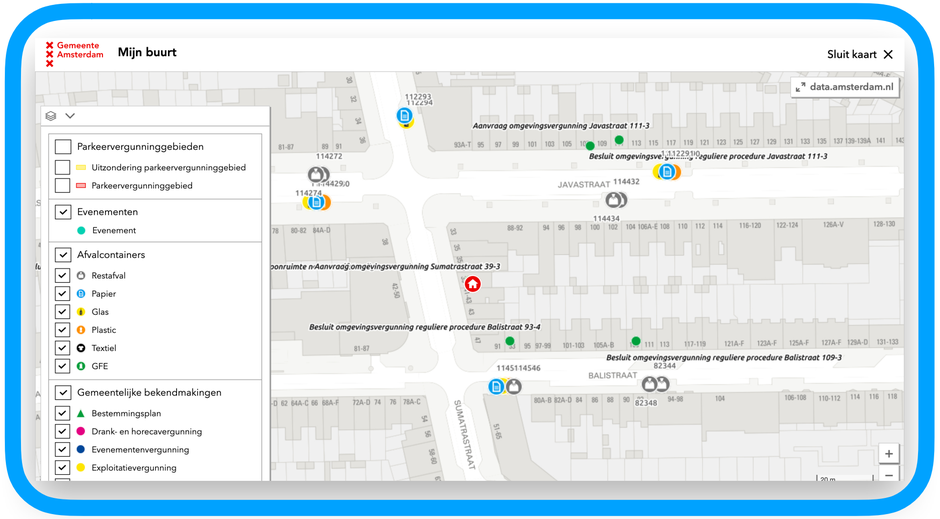
What's next?



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+ many more

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A map based on open standards and libraries



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The kickoff will be an internal “hackathon”



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Are we the only one doing this?



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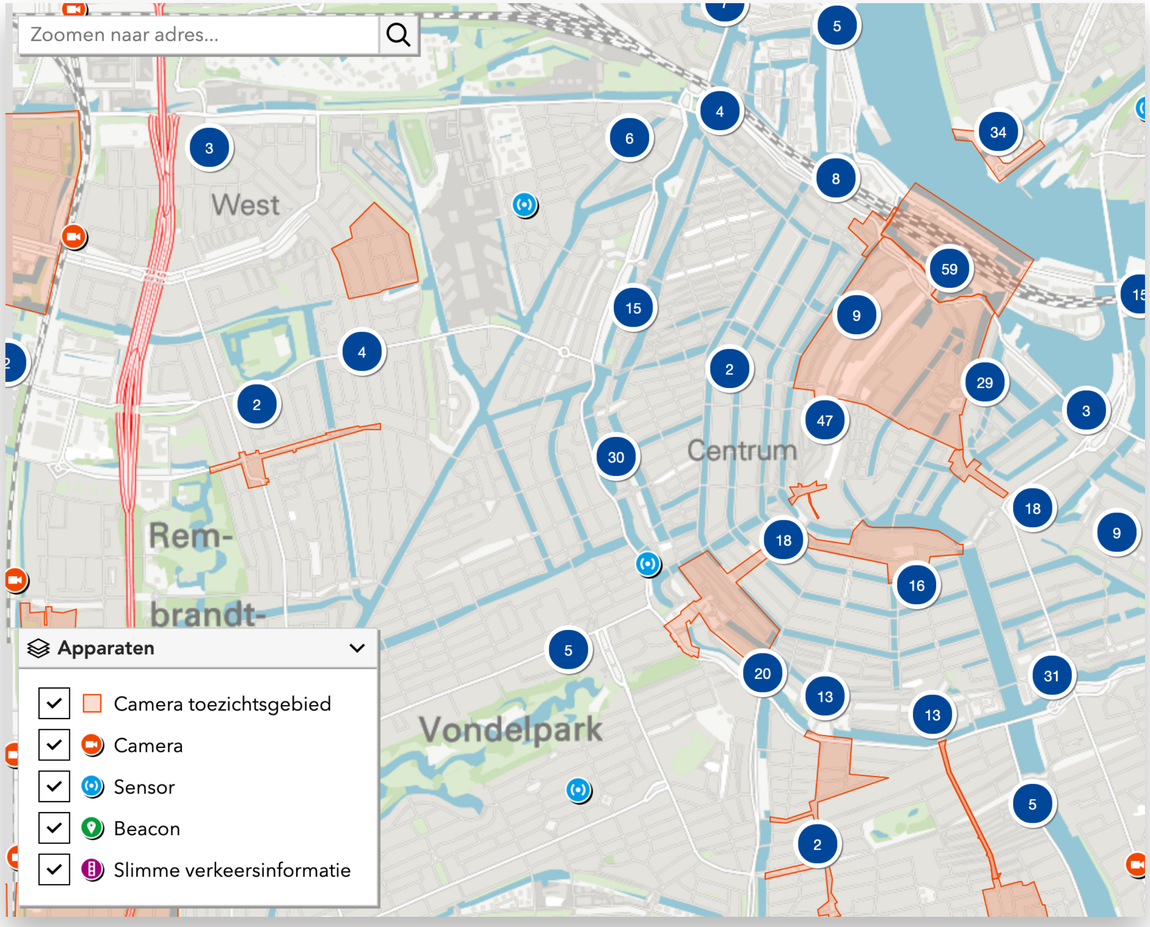
Interreg
North Sea Region
SCORE
European Regional Development Fund

EUROPEAN UNION

SCORE Project

9 European cities, 15 partners

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“IoT Registry”

- Developed together with **SCORE partners**

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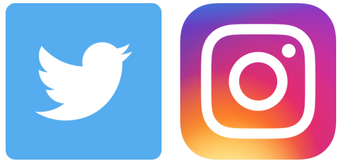


Want to learn more?



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Search: Roy Derks

https://amsterdam.github.io

https://github.com/amsterdam

https://npmjs.com/org/datapunt