

# *MyDynamicCity*

- highly customizable open-source PPGIS software employed for participatory mapping in the city of Zagreb

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# Participatory mapping approaches

Gained popularity in last two decades – online and workshop mapping

Research and practice

PPGIS (public participation geographical information systems) /

PGIS (participatory GIS) / VGI (volunteered geographic information)

Maps of gathered non-expert data to inform planning and management

**„PPGIS approaches seek to understand location-specific human values, perceptions, behaviour and preferences for future land use and development” (Fagerholm et al., 2021)**

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# PPGIS software(s)

Online data gathering

Questionnaire with mapping exercise

Number of PPGIS software – commercial and non-commercial – available on market

Basic structure:

**question + map + geometry (point, line, polygon) + database**



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# MyDynamicCity

Developed within  
CLEARING HOUSE and  
CULTUR-ES projects



Based on two **independent developments**

(KnETs tool) SilverKnET tool (Scheuer et al., 2018) +  
MyDynamicForest (Korpilo et al., 2018)

Complete survey **customization** (no „hard-coded” elements,  
generation of elements based on a configuration file)

Complete **control** over the survey (visually and structurally)  
via developed XML vocabulary

Combining PPGIS with knowledge elicitation game = multiple  
games > survey questions based on a filter variable!

**Open-source** – but not yet accessible

**Requirements:**

hosting server (Ngnix, Apache2, or other  
webserver; PHP 7.4 with extensions (sqlite3),  
Phalcon v4 as PHP microframework)

and a little coding experience



# MyDynamicCity - Zagreb

PPGIS survey built on MyDynamicCity software

**Goal:** mapping of selected cultural ecosystem services and ecosystem disservices related to urban green infrastructure in Zagreb as perceived by respondents

**Host:** Croatian Forest Research Institute server (sumins.hr)

**Customized domain:** [kartirajzelenilo.sumins.hr](http://kartirajzelenilo.sumins.hr) („map the greenery“)

Hrvatski English

## My Dynamic City

My Dynamic City is a PP-GIS tool to elicit the meaning of space to residents of urban spaces. Our goal is to understand better where people go, why, and how we can use this knowledge to preserve and enhance the ecological and recreational quality of our urban green spaces, now and in the future.

Get involved in My Dynamic City by taking our survey!

Start

# MyDynamicCity survey structure

Answers saved into database



Close ended questions

Close ended questions

Free text

Residence

Click Free text

Favourite places

Click

Recreation

Drag and drop multiple items

Appearance

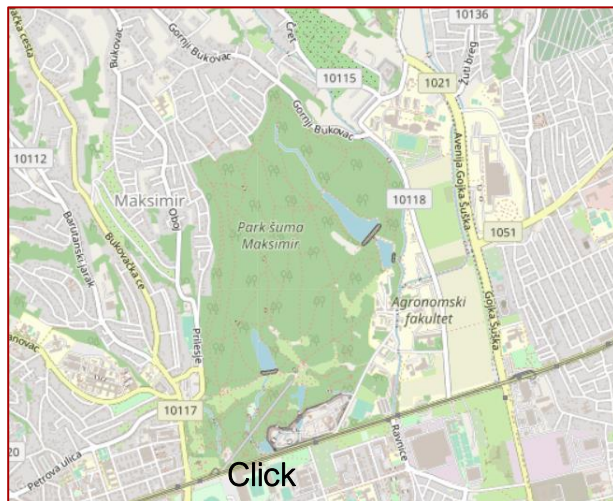
Education

Click

Cultural identity

Click

Likert scales  
Multiple choice  
Optional: upload GPX

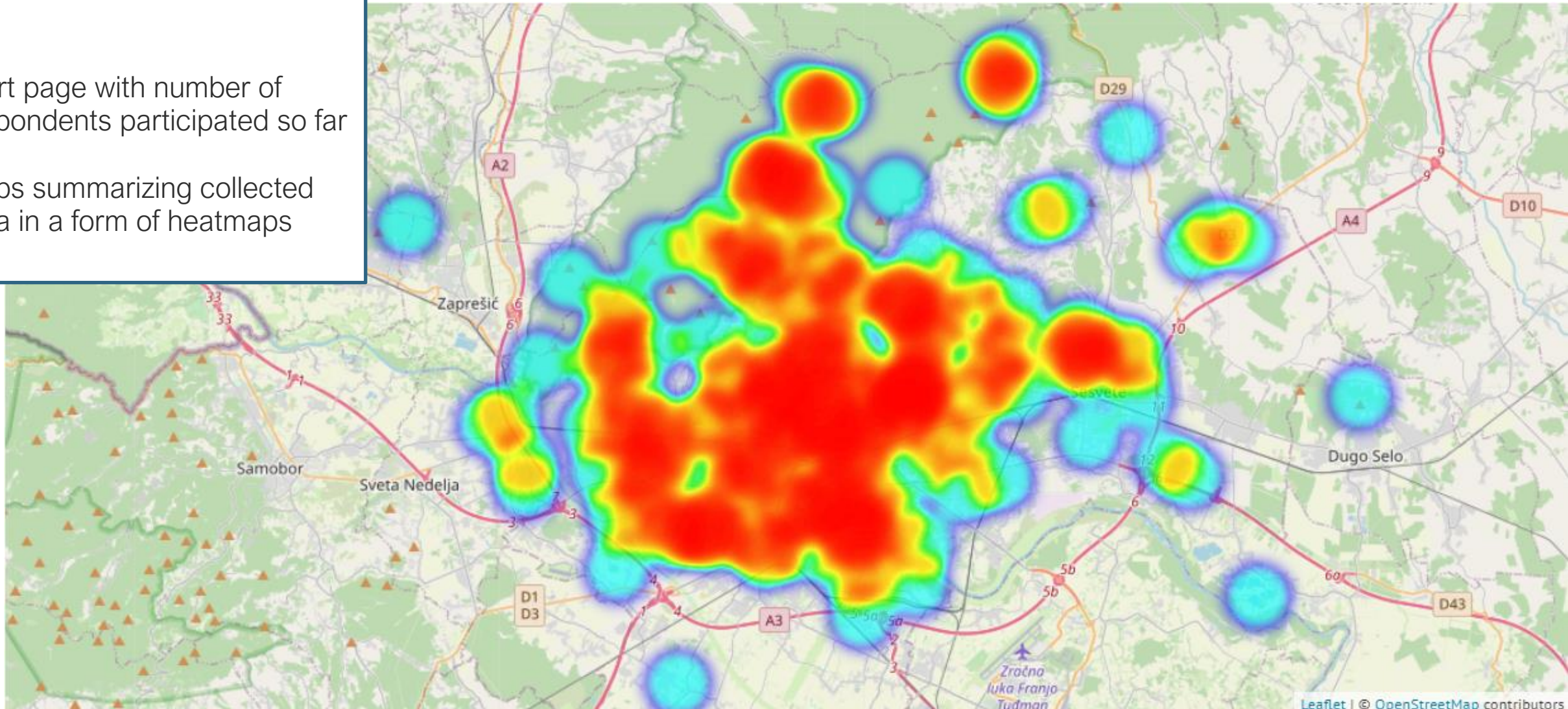


# Accessories

Start page with number of respondents participated so far

Maps summarizing collected data in a form of heatmaps

[link](#)



Heatmap of collected markers for favourite green spaces in Zagreb (22/9/2021)



# Usability of MyDynamicCity software

Based on MyDynamicCity Zagreb experience:

- **Highly useful** for PPGIS studies
- **Easy to adapt** to local context and study aims
- **Versatile** in design possibilities
- Opens **new opportunities** for enhancing PPGIS studies (multiple survey) – not used in Zagreb
- Allows for collecting rich array of spatial and aspatial data > producing **maps** of collected spatial data  
relationship between spatial datasets and other collected data - giving more **meaning** to spatial dataset

# Thank you!

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