



**Kanton Zürich
Statistisches Amt**

ZURICH REAL ESTATE APP

A SHINY APP FOR THE ZURICH REAL ESTATE
MARKET

MAX GRÜTTER
STATISTICAL OFFICE OF THE CANTON OF ZURICH

ZÜRICH REAL ESTATE DATA

A UNIQUE AND COMPLETE DATASET, WHICH YOU YOU CAN FIND ON OUR HOMEPAGE: STATISTIK.ZH.CH/IMMOMARKT



THE TOOLS NO LONGER MEET THE NEEDS OF OUR CUSTOMERS

ZHRE APP: CONCEPT



SHINY UI

fluidPage with sidebarLayout and fluidRow
Control widgets:
sliderInput, selectInput, bookmarkButton
Reset with actionButton and shinyjs
conditionalPanel
tabsetPanel

filter, mutate, render

SHINY SERVER

reactive({})
dplyr::filter
distr::dcc6
leaflet
gplot2
plotly





Reset inputs

Bookmark this APP state

Land Characteristics

Location Quality (min)

very moderate

Location Quality (max)

very good

Distance to Zurich city centre (in km)

0

35

Distance to Lake Zurich (in m)

0

5'000

Land area (in sqm)

50

5'000

House or Apartment Characteristics

Number of rooms (min)

1 room

Number of Rooms (max)

7+ rooms

Living space in sqm

0

500

Construction year

after 1900

1900

2017

Year of sale

2007

2017

Type of Property

Detached House

Regional level

Canton of Zurich

Data

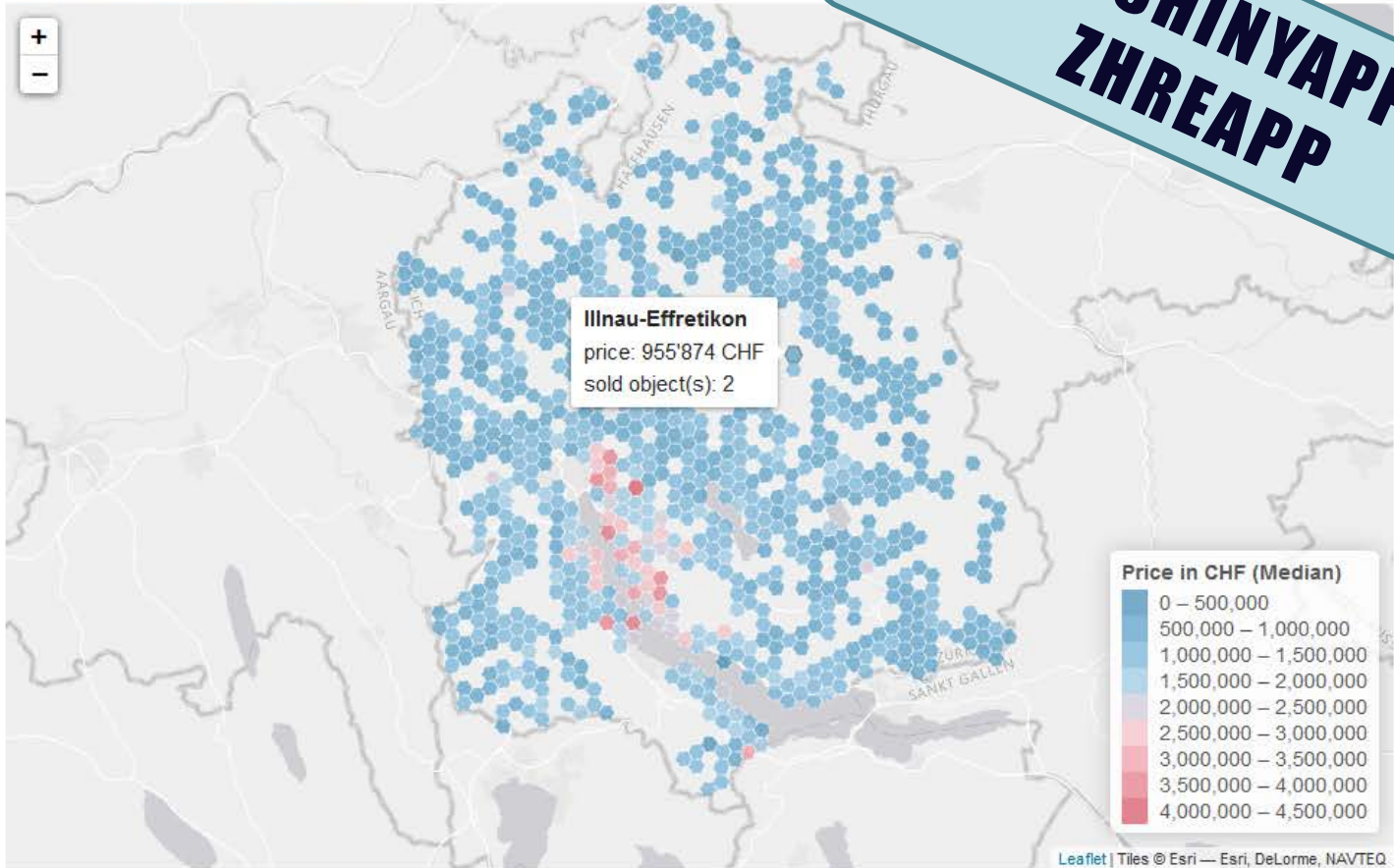
Map

Graphics

Igraphics

Explanations

Map of the Canton of Zurich



**MAXZH.SHINYAPPS.IO/
ZHREAPP**

ZHRE APP: SOLVED CHALLENGES

DATA PROTECTION

→ hexagon instead of exact coordinates

ONE APP FOR THREE STATISTIC

→ `conditionalPanel()`

GREAT FLEXIBILITY OF THE QUERY

→ `full Dataset & distr::dcc6`

DOWNLOAD OF CALCULATED DATA AND GRAPHS

→ `reactive({}) & downloadHandler()`

VISUALISATION IN A MAP

→ `reactive({}) & leaflet()`

WARNING IF NUMBER OF OBSERVATION IS TO LOW

→ `modalDialog()`

ZHRE APP: PENDING CHALLENGES

USABILITY ON MOBILE DEVICES

→ is there a solution without compromising flexibility

NO REDRAWING OF THE MAP IF FILTERS ARE CHANGED

→ should be possible with `leafletProxy()`

SELECTION WITHIN THE MAP

→ should be possible with `crosstalk()`

DOWNLOAD THE DATA AS FORMATTED EXCEL INCLUDING FILTERSETTINGS

→ work in progress. I've already tried a lot.....

SCALABILITY: ONE APP FOR MANY USERS

→ this becomes important as soon as we make the app available to our customers

Thank you!

TRY OUT & PLAY
YOURSELF:

[MAXZH.SHINYAPPS.IO/ZHREAPP](https://maxzh.shinyapps.io/zhreapp)

FIND THE CODE OFF THE APP
ON MY GITHUB ACCOUNT:

[GITHUB.COM/MXGRTR/ZHREAPP](https://github.com/MXGRTR/zhreapp)

KEEP IN TOUCH:

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