

futurice

# MyHelsinki API technical overview

# Heikki Heiskanen

An Aalto University media technology engineer with a history of working with the web and the augmented and virtual reality.

The main developer in MyHelsinki project with the guidance of more senior backend developers in Futurice

## EXPERIENCE

**AR/VR Developer**  
2014 –

**Web Developer**  
2012 – 2017

## PROJECT ROLE

**Code, code, code....**  
Did the actual coding of the API backend

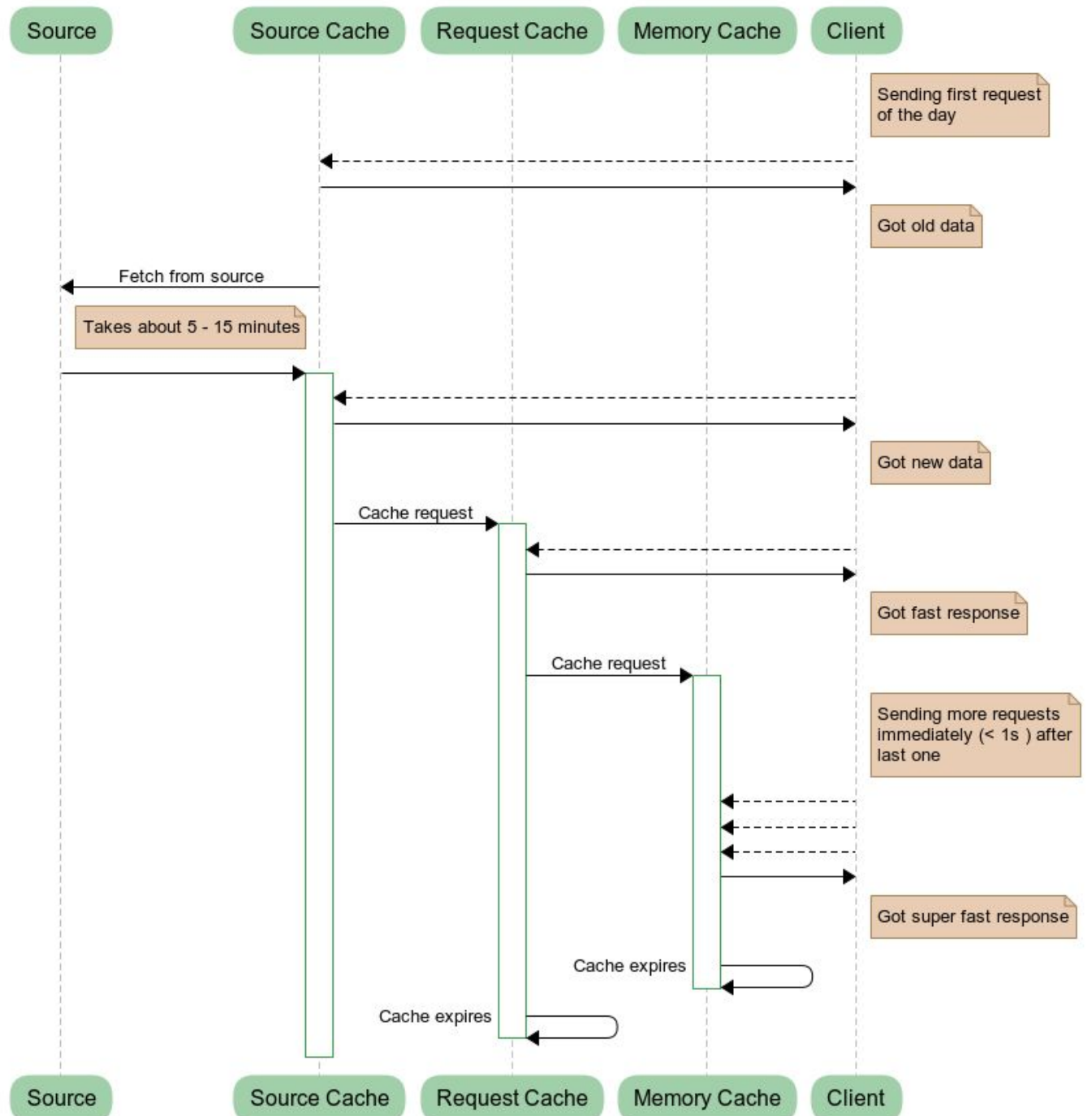


# How the cache works

The primary function of the API is to **fetch and store** the data from the source databases periodically.

To prevent the need to process the source data for **frequently requested** data, an intermediary cache serves recently requested data directly.

In case there would be a **burst of identical requests**, a third cache will respond directly from memory, preventing the need to fetch the information from the (slower) request cache.



# API data structure

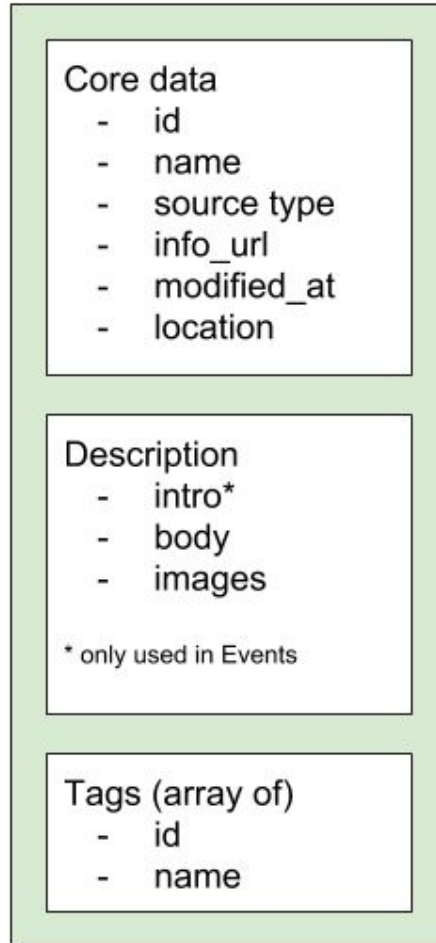
The guiding philosophy for the API data structure is to try to keep the structure as uniform as possible.

Currently the fields shared by all data categories are:

- Where (coordinates, address)
- What (title, text)
- Link to website
- Images
- Tags (structure same, content differs)

Data structures that are unique are:

- When
- Where (freeform text for specific instructions for activities)



	Events	Places	Activities
Core data	X	X	X
Description	X	X	X
Tags	X	X	X
Event dates	X		
Where When Duration			X
Opening hours		X	

