DecSpace

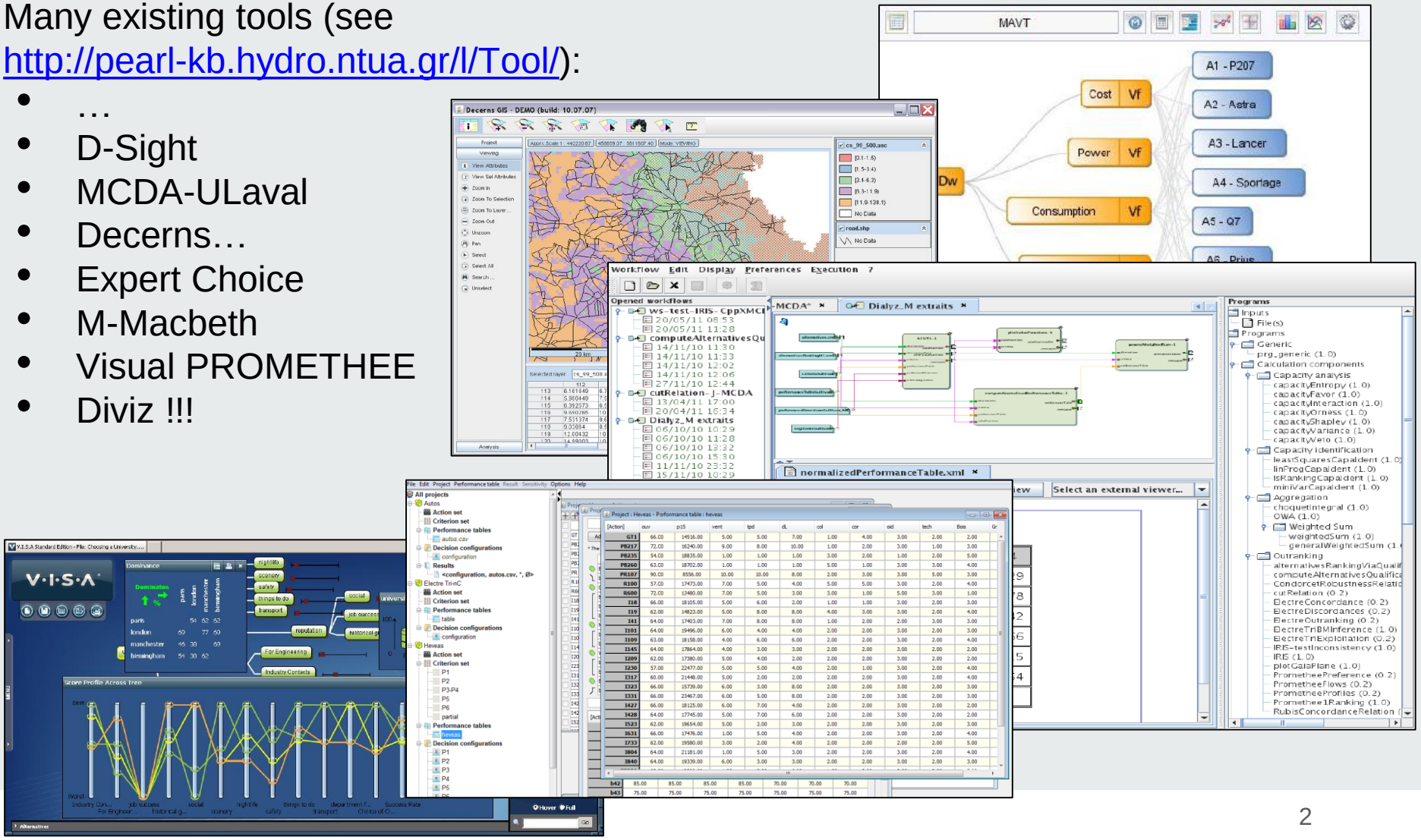
-

A (web/cloud) framework for MCDA

Many MCDA tools, but…

Many existing tools (see http://pearl-kb.hydro.ntua.gr/l/Tool/):

- …
- D-Sight
- MCDA-ULaval
- Decerns…
- Expert Choice
- M-Macbeth
- Visual PROMETHEE
- Diviz !!!



https://www.decision-deck.org/project/

Decision Deck

INITIATIVES NEWS EVENTS

Decision Deck

The Decision Deck project collaboratively develops Open Source software tools to support the Multi-Criteria Decision Aiding (MCDA) process.

diviz v17.2

diviz v17.2 has been released. Download it!

Info *Board* *Manifesto* *Contact*

Initiatives

diviz

A software for designing, executing and sharing MCDA methods, algorithms and experiments

XMCDA

A standardized XML recommendation to represent objects and data from the MCDA field which allows MCDA software to be interoperable

XMCDA web services

Distributed computational MCDA resources, using the XMCDA standard

GIS

An initiative linking Geographical Information Systems and MCDA

TÉCNICO LISBOA

inesc id lisboa

Decision Deck

HOME | CALL FOR ABSTRACTS | IMPORTANT DATES | PROGRAM | REGISTRATION | ORGANIZATION | VENUE | ACCOMMODATION, TRAVEL AND TOURISM | SPONSORS

DDWS15 - 15th Decision Deck Workshop

Welcome to the 15th Decision Deck Workshop, which is co-organised with **the 88th EWG-MCDA Meeting** in Lisbon. Note, while the Decision Deck Workshop will be held at **Instituto Superior Técnico**, the EWG-MCDA Meeting will be held at **Academia das Ciências de Lisboa**.

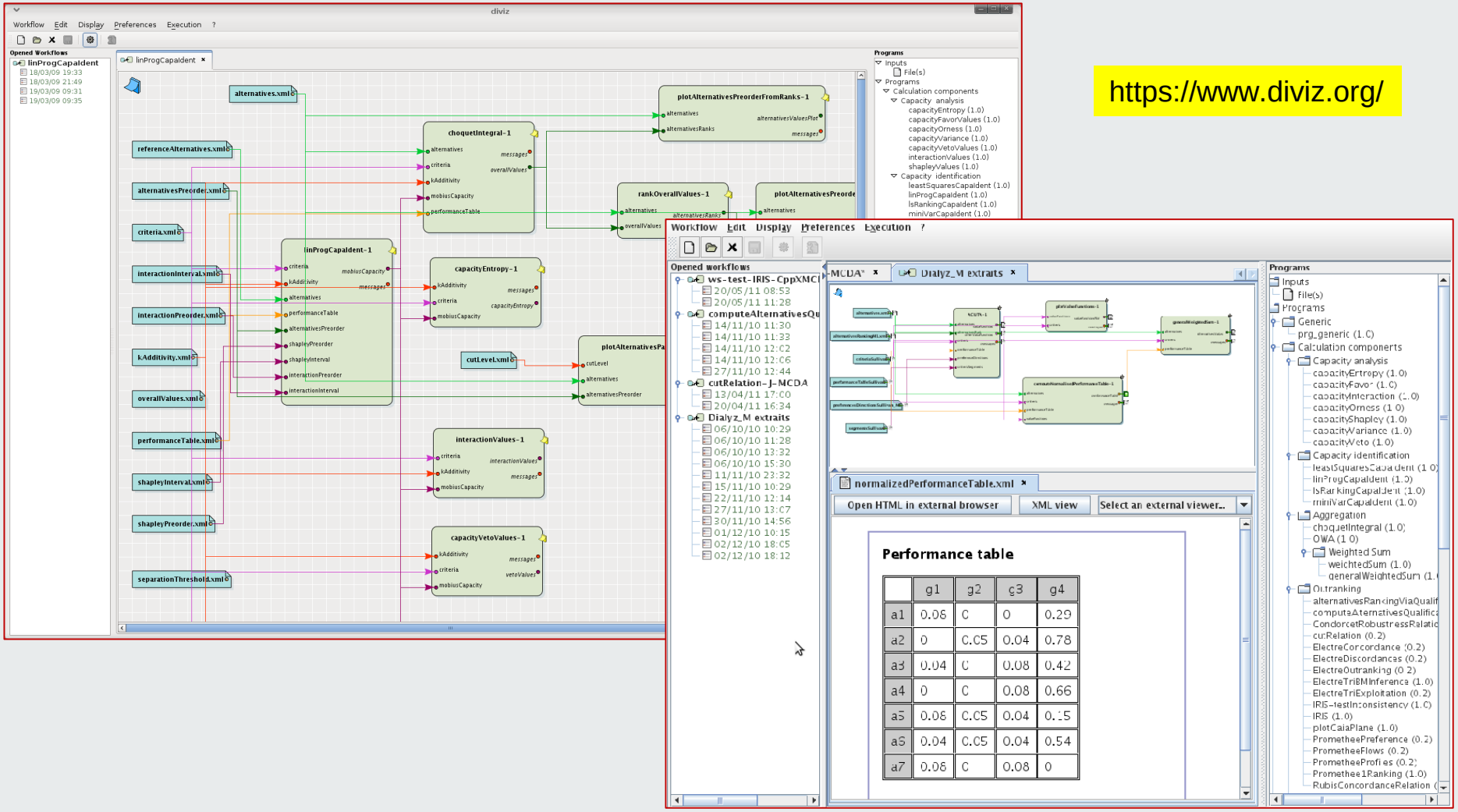
What is Decision Deck?

The Decision Deck project aims at collaboratively developing tools to support the Multiple Criteria Decision Aiding (MCDA) process. The purpose of the project is to provide effective tools for three types of "users":

- consultants or analysts who use MCDA tools to support actual decision makers involved in real world decision problems,

Diviz, a great resource, with a very rich server (MANY METHODS AVAILABLE) and a desktop client tool…

https://www.diviz.org/

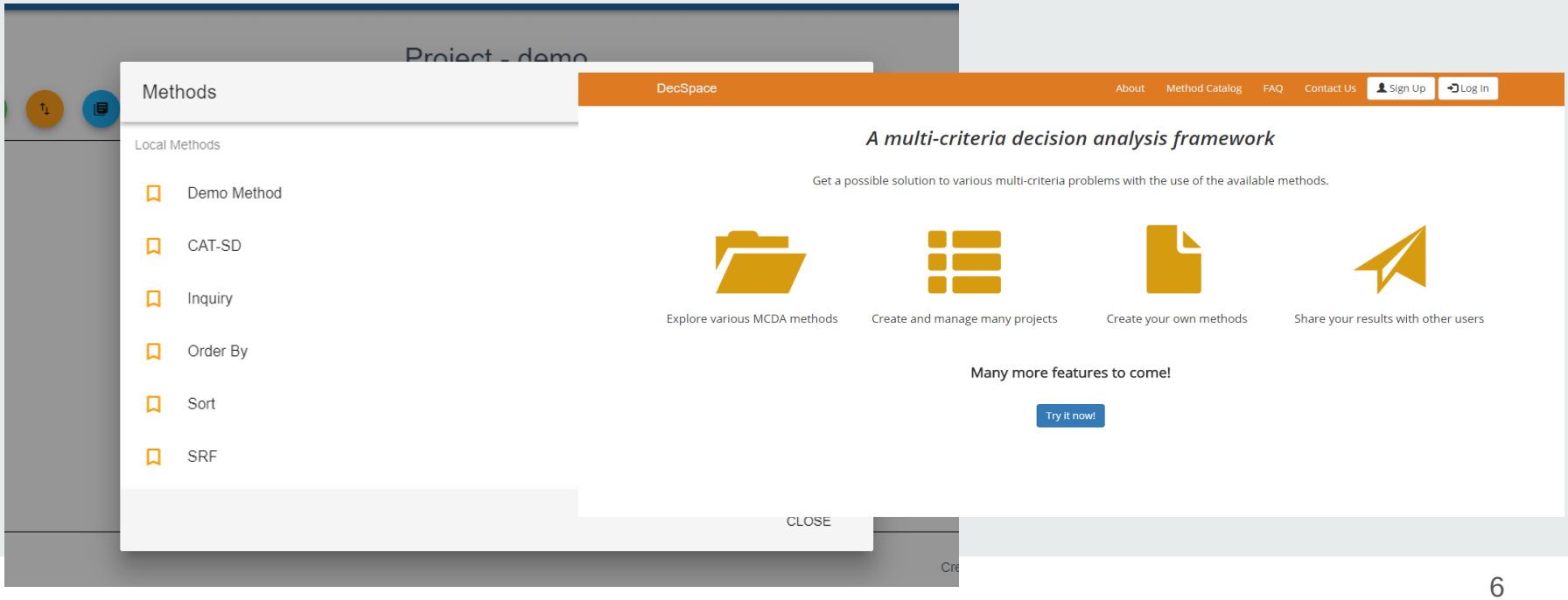


	g1	g2	g3	g4
a1	0.06	C	0	0.29
a2	0	C.C5	0.04	0.78
a3	0.04	C	0.08	0.42
a4	0	C	0.08	0.66
a5	0.08	C.C5	0.04	0.15
a6	0.04	C.C5	0.04	0.54
a7	0.06	C	0.08	0

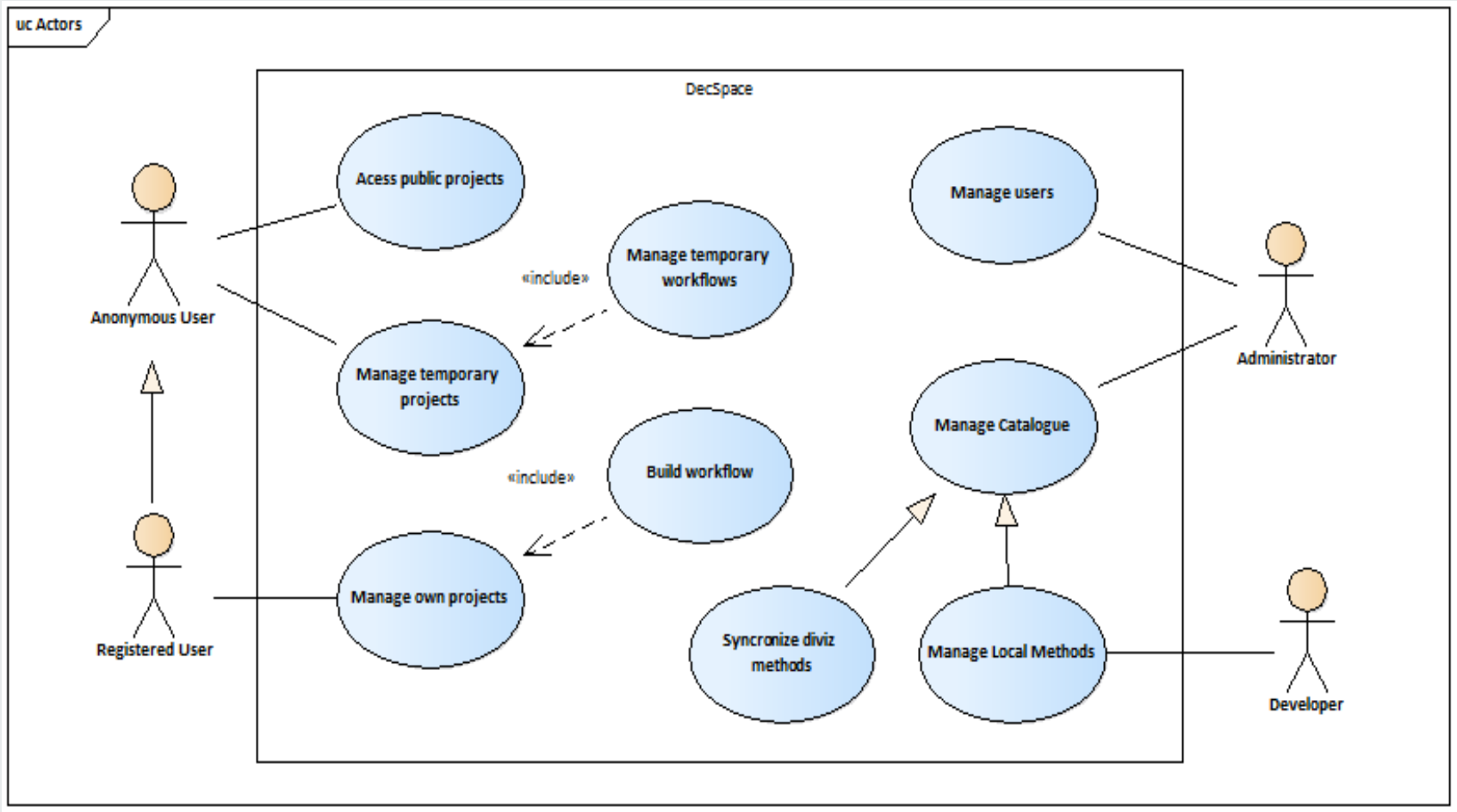
DecSpace Objectives

A **web** framework:

- For MCDA specialists (experimenting new methods, new workflows…)
- For non-specialists (lowering the complexity of using MCDA methods).
- And ultimately also a platform for teaching/learning and collaborating (private and public projects, tutorials to demonstrate methods, etc.)…



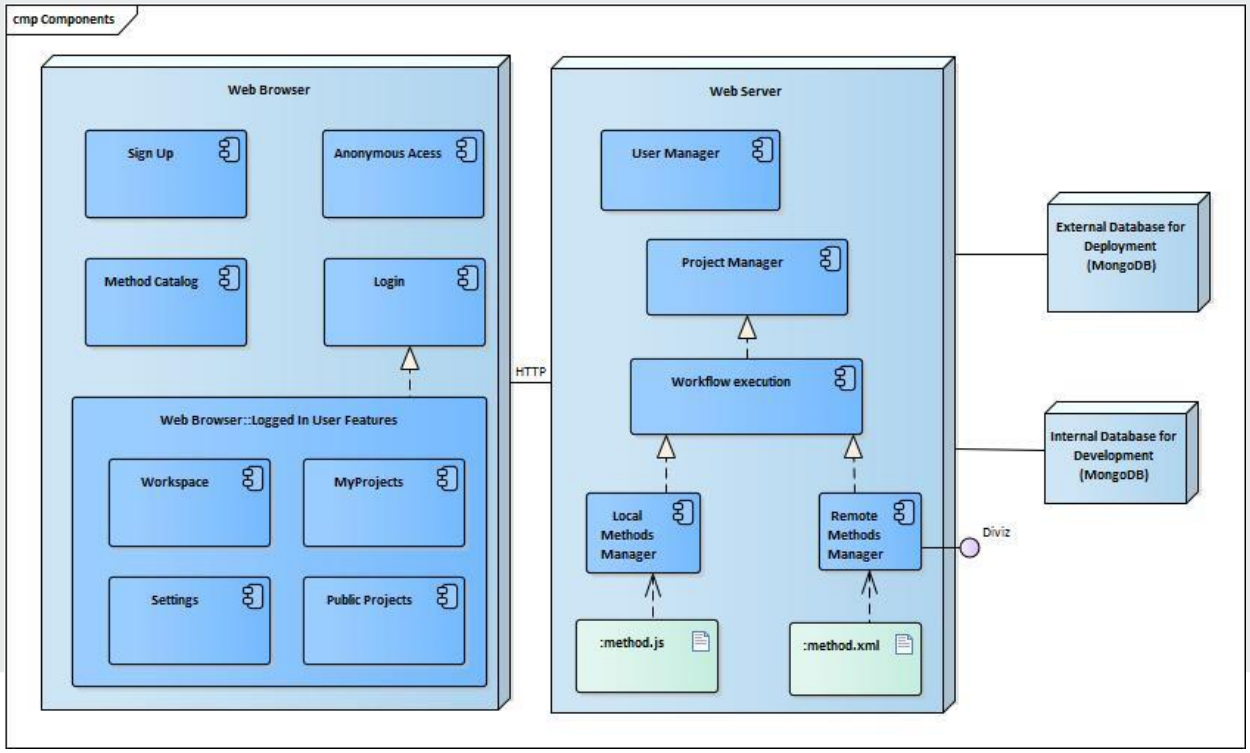
DecSpace Overview
Use Cases



DecSpace Overview
Architecture and Technology

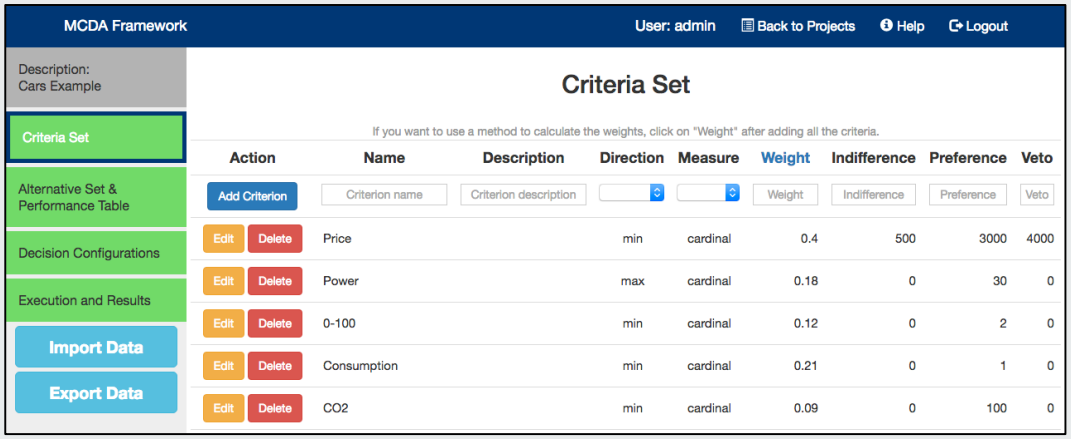
Architecture
- 3 tiers
  - Client tier
  - Application tier
  - Data tier

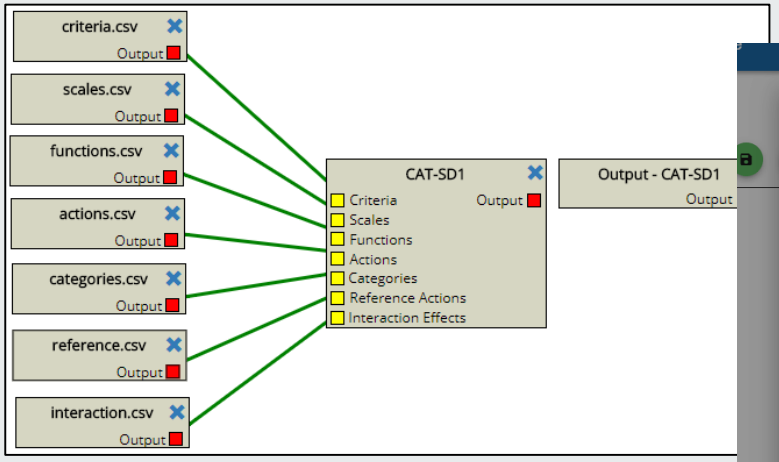
Technology
- Tech Stack
  - Vue.js (was ~~Angular.js…~~)
  - Node.js (with Express web application framework)
  - Mongodb (for persistency…)

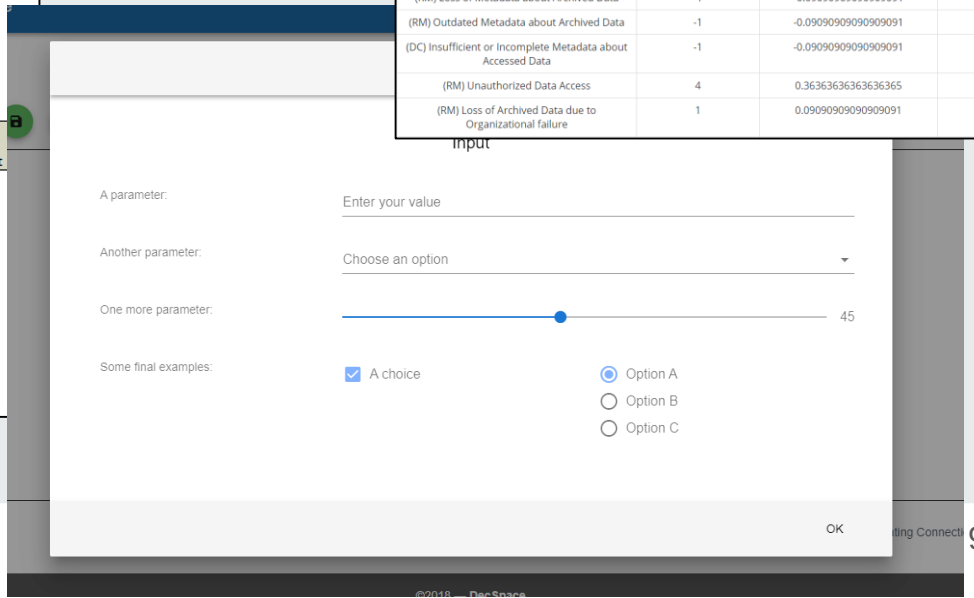


DecSpace Overview…

Just like Diviz, but with Web interface, easy to input data (upload files, or edit locally…)



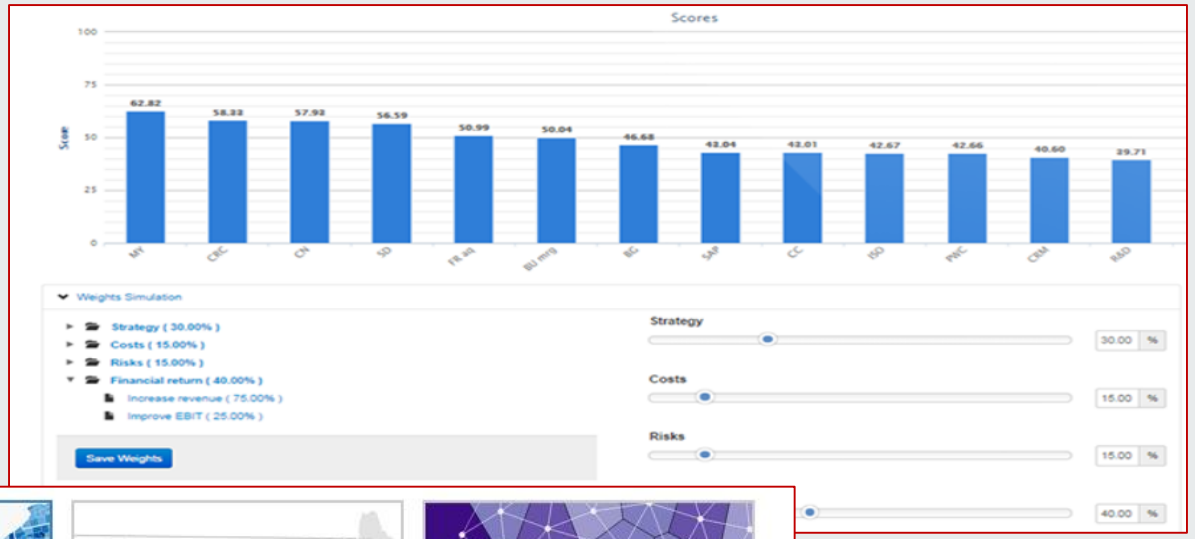


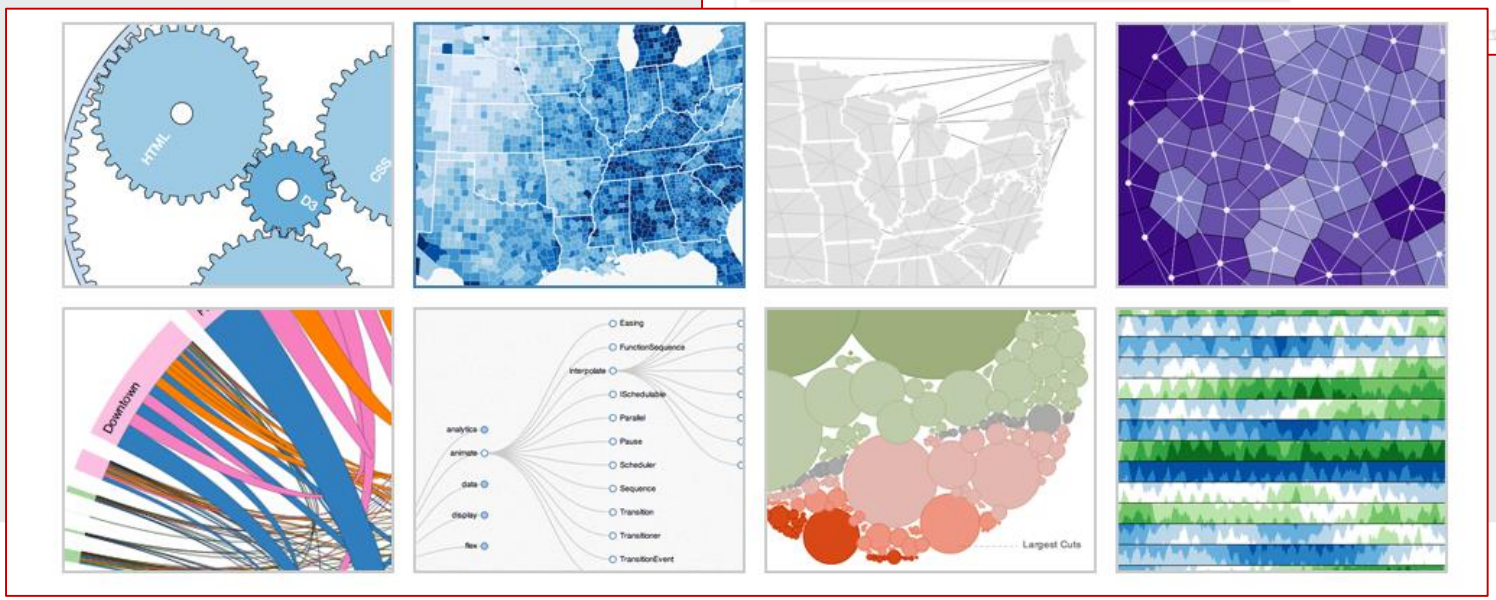


Future steps:
- **Collaborate with the Decision Deck Project**
- **Explore state of the art web technology**
- **…**

e.g. D3.js is a powerful JavaScript library for data visualization for dashboards…:

- Bar Chart
- Bubble Chart
- Treemap
- HeatmapsGeo Web Map
- …





Project Planning (WORKING CLOSER WITH THE DECISION DECK PROJECT)

- Present – private functional prototype (but a permanent “moving target”, as we’ve been “testing technology”…)
- December 2018 – public V1.00:
  - all core functions for project management
  - small catalogue of local functional methods
  - a couple for remote functional Diviz methods
- …June 2019 – public V2.00 (
  - more methods (local and remote…)
  - library of visualization methods
  - support for “tutorial projects”

- https://www.youtube.com/watch?v=Vh0Hu2pOBx4&feature=youtu.be

BTW,

- would you like us to do anything for you?
- are you doing/planning anything related?...

Just email us:

- **José Borbinha**
- **jlb@tecnico.ulisboa.pt**

Images:

- https://depositphotos.com/56153711/stock-photo-handwritten-underlined-lets-do-it.html
- https://www.joebarrios.com/wp-content/uploads/2016/07/what-is-a-requirement-for-business-analysts-1024x853.jpg
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