Web-Lar

Task presentation and discussion

Task assignements

Extension of the LAR.js and LAR-DEMO.js projects with convex cells	• Andrea Somma • Elisa Lamberti • Fabio Cumbo
Integration of the matrix computation web-service	• Fabrizio Rebecca • Luca Menichetti **(Group Leader)**
Integration of PDB visualization service	• Oscar Eijsermans

Extension of the LAR.js and LAR-DEMO.js
projects with convex cells

Extension of the LAR.js and LAR-DEMO.js projects with convex cells

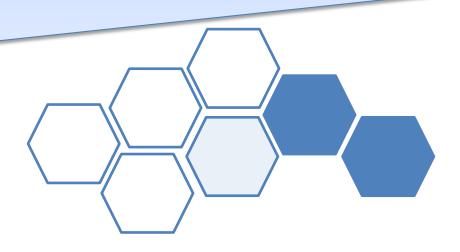## 1. Implementation of the cartesian product function between convex cells.

- A – Study of the "larProduct" function, currently present in lar.py.
- B – Integration of the lar.js project with this function, which will allow to do the product between convex cells and which is based on the "larProduct" function.

2. Generalization of the "extract" function, present in lar.js for simplicial complexes.

- A – Study of the "larFacets" function (and it's implemented algorithm) present in lar.py.
- B – Reimplementation of that function in the lar.js project, currently provided with an extraction function that works only on simplexes.

Andrea Somma assigment: 1-A, 1-B
Elisa Lamberti and Fabio Cumbo assigment: 2-A, 2-B

Integration of the matrix computation web-service

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1. Localization of code's sections that use matrix's operation

- A - Creation of an interface that links with the computation layer

2. Creation of a proper layer that implements the computation of matrix's operation hiding the logic implementation
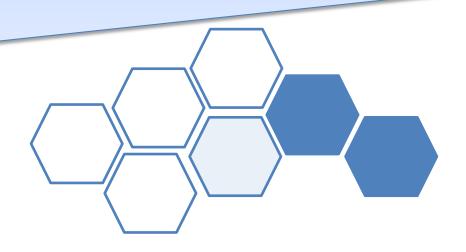
- A - Management of the matrix format with opportune encoding for the forwarding on the network
- B - Realization of a procedure for the communication's establishment with the web service on a public server
- C - Answer management and decoding

3. Setup a web service that offers such operation online

- A - Acquisition, request management and result forwarding

Fabrizio Rebecca assigment: 1-A, 2-A, 2-C
Luca Menichetti assigment: 1-A, 2-B, 3-A

Integration of PDB visualization service

Integration of PDB visualization service

1. Integration of webpdb and webmol

- A - Identify the function structure of WebMOL and WebPDB
- B - Identify the connection between the two applications
- C - Definition of an connection interface between the two applications
- D - Structure the two projects in one project

Oscar Eijsermans assigment: 1