

Linked Movie Exploration Graph

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Linked Movie Exploration Graph

- Language: JavaScript
- Frontend-Template: Materialdesign Light
- Libraries:
 - Graph-Drawing: Vis.JS
 - Jsonp-Requests: fetch-jsonp
- Sparql-Endpoints:
 - LinkedMDB
- Image-Endpoint:
 - Wikipedia Image API



Foreseen Challenges (1/2)

- Performance of graph drawing
 - Vue.js best API in comparison to cytoscape.js and jsnetworkx
 - Vue.js has best engine to dynamically calculate node positions
 - All dynamic graph libraries struggle when displaying animated images
 - Outsource physics calculations in web worker
 - But communication with DOM difficult
 - Possibility to disable node images for larger graphs
- Merge already existing nodes
 - Lookup by LinkedMDB URIs



Foreseen Challenges (2/2)

- Cross-Domain-Requests are forbidden in JavaScript
 - LinkedMDB does not offer CORS
 - Jsonp
- Movie recommendations
 - Missing LinkedMDB properties for movie topics
 - Missing links between LinkedMDB and DBPedia
 - Not possible with LinkedMDB and DBPedia
 - Show pre- and sequels instead



Unforeseen Challenges

- Image Source
 - Image size needs to be strictly limited
 - Performance
 - Network delay
 - Disambiguation needed
 - Wikipedia Image API (but no disambiguation possible)
- LinkedMDB outage
 - Additionally corrupt LinkedMDB dumps
 - Local Blazegraph endpoint (but no Jsonp possible)



Live Demo

