Libraries and Frameworks

# React JS 16.13.x

We’re planning to use React JS as the core of the front end of the application.

# react-burger-menu 2.7.x

“An off-canvas sidebar React component with a collection of effects and styles using CSS transitions and SVG path animations.”

We intend to use this library as a shortcut to create sidebars in our application. Search menu, paper details section and options menu of the application will be implemented as a sidebar. So we figured, using this component comes in handy.

# react-contexify 4.0.x

“react-contextify is the easiest way to add a context menu to your react app.“

We intend to present the user with multiple extending options while the user interacts with the graph. Most user-friendly way to implement this functionality is through the context menu. For that reason, we’re planning to use this library to create useful context menus.

# Redux 4.0.x / React Redux 7.2.x

“Redux is a predictable state container for JavaScript apps.”

Redux is useful when we think of the functionalities we intend to provide to the customer. There’ll be multiple components that need to access and modify some common state. Without Redux, distributing and modifying this common state will probably be extremely painful.

With Redux, we can share common states across components and we can modify these states through reducers and middlewares. For example, when a user starts a search through the search bar, we can call appropriate action calls through middlewares and pull the needed information from the server, and then update the state via reducers. In the meantime, the component which displays the graph gets notified and reacts to the change.

# react-cytoscape 1.2.x / cytoscape 3.15.x

“Graph theory (network) library for visualisation and analysis”

We intend to use Cytoscape as a way to represent entities (papers, datasets, users) and relations between them.

# Theming

1. react-bootstrap 1.2.x (Bootstrap 4.5)
2. react-fontawesome 1.7.x
3. Google Fonts