UXgraph - Vue.js library with predefined D3 graphs

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Introduction

The focus of this work is to create reusable Vue.js components based on D3.js SVG graphs.



Components created during this project are then gathered into **Vue library**, which is hosted on GitHub as an **open-source** tool under MIT License.

Since D3 offers a lot of possibilities, a programmer may be focused more on finding an appropriate coding solution, then on designing an **understandable** graph. So, UXgraph provides already predefined and easy to use components. The user just needs to connect a dataset and select a color (though **default color scheme** is provided too).

Results

npm install ux-graph

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- New Vue extension, which uses D3 to create reusable components for data visualization.
- UXgraph provides a user with a set of predefined graphs, which can be then easily integrated into any Vue project.
- Several graphs (**sparklines**, **line charts** and **bar charts**) are implemented as single file library components.
- Library is published as **npm module**, and had **895 downloads** since then.
- It is **open-source** and available on GitHub.
- Other types of graphs (stacked bar charts and bullet graphs) would be added during the **next stage**, in terms of my Thesis project.

Usage example





Problem definition





- Aesthetic and minimalist design
- Easy way to add a new sample
- Default settings with best UX practices
- Ability to autogenerate testing samples
- **Responsive, cross-platform** solution

Ergonomics of the interaction

For example, ur visual perception experience troubles comparing



Library implementation



Following components are already implemented and can be imported: Sparklines, Linecharts, Barcharts, HorizontalBarcharts. Every component has a set of **parameters**, which represent **customizable** graph settings. UXgraph components have default properties defined.



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