Rapid Graph

Created by team RandM

Web-Based Visual Graph Analyzer

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Project Description

The mathematical graph analyzers that exist today generally require installation and/or use of unintuitive, complicated mathematics software.

RapidGraph is a web-based graph analyzer that is easily accessible to anyone with a modern web-browser.

It is easy to rapidly create graphs with a visually-appealing and intuitive user interface, and efficiently analyze them with an modular, plugin-based, extendable back-end.

Features

Rapidly Accessible - It's web-based which means it will work in any modern browser without needing to install any additional software.

Rapidly Createable - An intuitive, consistent, and easy-to-use interface encourages fast and accurate graph creation.

Rapidly Portable - RapidGraph is built with standard web languages and open-source technologies allowing it to be installed on and used with virtually any computer system.
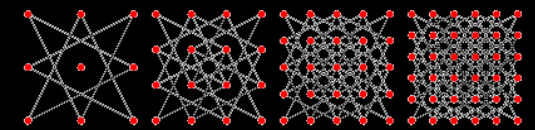
Rapidly Modular - A plugin system allows for fast and consistent functional extendibility.

Applications

There are many base applications bundled with RapidGraph, including:

Analyzing graph type - simple, planar, bipartite, complete, clique, n-cubes, and different flavors of trees.

Real-world applications – The "knight's tour" problem, peer-to-peer networking, the "travelling salesman" problem, the "instant insanity" puzzle, and map-coloring.

"Knight's Tour" graphs for different sized boards

Credits

Michael Anderson
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Technical Details

The **front-end** was created using the following W3 standard web languages: HTML, JavaScript, CSS, and jQuery.

The **back-end** was built using Django, Python, Apache, C and C++

This project is entirely open-source. You can find out more at www.rapidgraph.org

Conclusion

We learned that... (will fill when finished)

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