Easy Gantt, v. 1.6 – Features description

Easy Gantt is a web-based application that allows users to **generate, visualize, and customize a Gantt chart** based on project task data provided in a comma-separated or tab-separated format. It calculates project schedules, dependencies, critical paths, and ideal completion percentages, displaying the results as an SVG chart. The application also provides functionalities to **save and load project configurations, data** and export the chart in different formats.

Here are some of the most important features of Easy Gantt:

- **CSV/Tab Input for Task Data**: Users can input task data as comma-separated or tab-separated values for Task Id, Task name, Duration, Percent complete, and Predecessors in a textarea field.
- **Gantt Chart Generation**: The application parses the input data and generates a visual Gantt chart using SVG (Scalable Vector Graphics).
- **Dependency Handling**: It supports parsing and calculating dependencies between tasks, including Finish-to-Start (FS), Start-to-Start (SS), Finish-to-Finish (FF), and Start-to-Finish (SF) types, as well as lead and lag times.
- **Critical Path Calculation**: The code calculates the critical path, defined as tasks with zero total float on the longest path.
- **Ideal Percent Complete and Delay Calculation**: It calculates an "ideal" percent complete based on the project start date and today's date relative to the task duration, and identifies tasks that are "delayed" if their actual percent complete is less than the ideal.
- **Milestone Identification**: Tasks with a duration of 0 days are identified and represented as milestones.
- **Configurable Non-Working Dates**: Users can specify non-working days, including toggling Saturday and Sunday as non-working days, and defining specific non-working date ranges via a popup interface. These dates are factored into schedule calculations.
- **Extensive Chart Customization Options**: The application offers numerous settings organized into tabs (Project, Header, Chart, Bars, Tasks, Dates). These settings control visual aspects like colors, sizes, fonts, date formats, and visibility of elements.
- **Task-Specific Settings**: Settings from the Bars, Tasks, and Dates tabs can be applied selectively to one or more tasks using a multi-select selector based on Task Ids.

- **Detailed Task Info Display**: Hovering over bars, milestones, or task labels in the chart shows a tooltip (SVG <title> element) with detailed information about the task, including dates, duration, floats, percent complete, predecessors, and critical/delay status.
- **Save/Load Project (JSON)**: The application allows saving the current configuration (all settings and the input CSV data) to a JSON file and loading it back later to restore the project state.
- **Save Tasks (CSV)**: The parsed task data, including calculated fields like dates, elapsed duration, and total float, can be saved to a CSV file.
- **Export Chart (SVG)**: The generated SVG Gantt chart can be exported as a standalone SVG file.
- **Dependency Line Visualization**: Dependencies between tasks are visualized with connecting lines, arrows, and customizable styles (color, width, dashed).
- **Today's Date Line**: A vertical line can be displayed on the chart to indicate today's date, if it falls within the chart's date range, with customizable color, width, and style (dashed/not dashed).
- **Detailed Task Info Lines**: Options exist to show additional lines of information next to the task name, such as Actual/Ideal Percent, Duration/Elapsed/Total Float, and Predecessors.
- **Automatic Chart Update**: The Gantt chart is automatically regenerated when the input CSV data or any of the settings controls are changed.
- **Basic Error Handling**: The application includes error handling for issues during CSV parsing, such as incorrect formatting or dependency loops.