Schedulvis
visualizing personal time logs
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Motivation

- Curiosity about the distribution of my productive time
- Potentially gaining actionable insight through reflection
Dataset

• Source: myself using toggl[1]

• Preparation: manual transcription…

• Description: time logs of activities where entries contain the start times and end times (accurate to minutes) and the project they belong. Semantically, I tracked the activities that belong to my long term goals

• Abstract Description: non-overlapping intervals on a continuous timeline, grouped into sets.

[1] toggl, toggl.com
Tasks

• Provide **overview** of the time logs such as the sum of interval length (activity duration), distribution of the intervals.

• Allow **exploration** of raw data
Inspirations

• Calendar metaphor and layout [1]

• Using under bars to show occurrence and duration [2]

• Common reporting for example [3]

• Personal interest

[3] toggl, toggl.com
Demo
Screenshots: Initial View
Screenshots: Hover over Weekly Bar
Screenshots: Detail on Hover
Calendar Heatmap

What: time segment utilization rate, e.g. If 30 minutes of work are done on Monday 1:00pm - 1:05pm over 10 weeks, the utilization rate would be $30 / (5 * 10) = 60\%$.

Why: provide overview of the aggregate weekly distribution of the intervals.

How: approx. continuous heatmap on the grid (calendar), utilization rate mapped to linear lightness (HSL) scale.
Composition Glyph

What: top contribution of sets (projects) in weekly 2-hour time segments.
e.g. If 800 minutes of work are done on Monday 1:00pm - 3:00pm over 10 weeks, and 200 minutes of those are on infoVis, then the contribution would be 25%.

Why: overview the distribution of intervals over different sets (projects) in a time segment.
(help see if different projects are independent in time usage)

How: bar chart of three projects with the highest contribution to a segment sorted in descending order of contribution.

Use: One dominating bar indicates the time segment are dominated by some set (project), flat pattern indicates that the time segments are shared by different sets.
Aggregate Hours Bar Chart

• What: sum of interval length over fixed-step time intervals (e.g. total hours in a week or day)

• Why: show temporal aggregate overview.

• How: overlaid bar chart with daily or weekly total hours as the length, on a time x-axis.

• Also used for navigating through raw data.
Project Bars

• What: sum of interval length in a fixed-step time interval (week) for different projects (total hour spent on each project in each week).

• Why: View the aggregate changes for each sets (project) of over weeks

• How: the sum of interval length mapped to lightness (0 - 25hrs, clamped), position of the bars are mapped to the same x-axis as the bar chart.

• Possible pro: easy to identify missed weeks, no cluttering

• Possible con: hard to compare accurately
Future Work

• Visualize complete personal log (less holes)

• Visualize long term personal log (more projects, more weeks)

• Streamline preparation, data collection, actions in addition to reflection [1]

• Make the visualization more accessible and useful in personal context [2]

• Much more…

[1] Li, I. et al, A Stage-Based Model of Personal Informatics Systems, CHI10
Questions?

- Project Location: https://github.com/toNine/visproject