

Visualizing Observations of Daily Living for Babies

We created visualizations for users of KidOoDL, a student-developed smartphone and web application for parents to track information about their new babies.

Parents want to learn about two main aspects of the daily data they collect, amounts and schedules. We addressed this with two views. The amounts view gives total sleep, feeding, and diaper use per day for the selected time range. Schedule view shows the times of day at which events occurred and their durations.

Amounts view can be set to break up daily totals into stacked naps or feedings.

Our linear milestone graph plots a dot for each developmental milestone the child has reached. Time flows from left to right, with one change in scale needed to keep the size manageable. The age ranges are color coded, so that dots occurring before or after their expected time appear in a different color than the surrounding dots. One challenge was to determine how best to show milestones that have not occurred but were expected by the current time. These are shown in a far right column.

Students:

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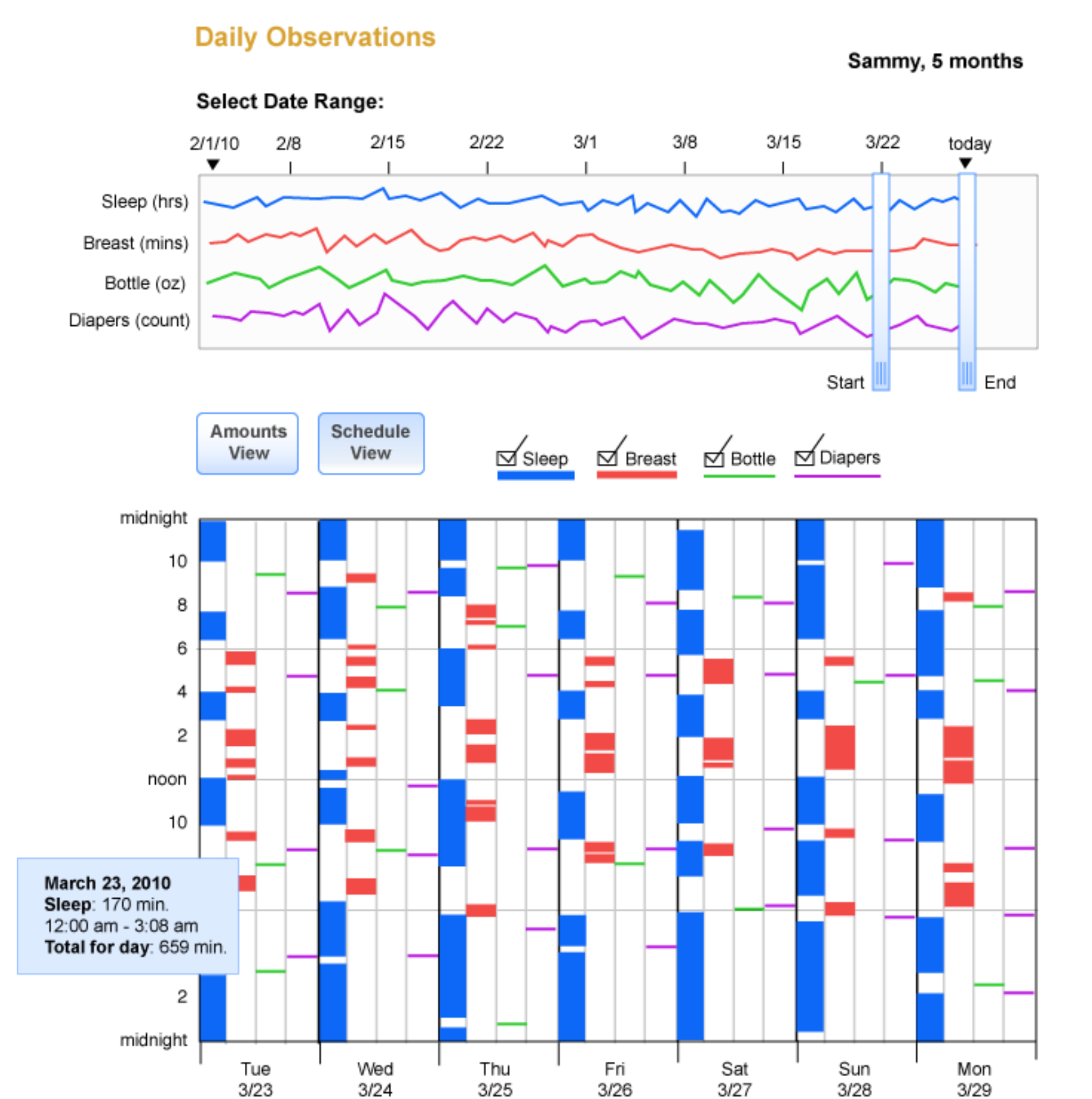
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We wanted to find a way to indicate quickly to a pediatrician when a child is not progressing normally. Spider plots gave us a way to show the categories of developmental milestones (in groups defined by angular wedges) and also indicate time by distance from the center. The months in which a group of milestones are expected to occur are highlighted in a color that corresponds to the color in the linear graph.



Users can select a range of times with the slider.



Schedule view shows the times at which events occurred and their durations. It can help parents predict their baby's needs and behavior.

Developmental Milestones



Clicking in a category area expands that category to reveal the descriptions for each dot.

