Temperature & Dew Point

Minimum Indicator

Layout – Timeline Stack

Implementation
- Major Components
  - Weather data parser
  - Java 2D visualization drawing engine
  - Java Swing graphical user interface
- Available online as an applet

User Walkthroughs
- We performed paper prototype walkthroughs with two licensed pilots
- This led to several changes and additions to the visualization design
- Both participants believed this visualization would be helpful

Walkthrough Feedback
- Preset values for minimum weather conditions would be helpful
- Users should be able to drill down to see raw data corresponding to a glyph
- Temperature/dew point bar
  - Absolute scale vs. dynamic scale
  - Spread is more important than temperature
Walkthrough Feedback

- Visibility in forecasts: The difference between 6 and 6+ should be more prominent
- A legend should be available for first time users
- Some information is missing
  - Should show local time and UTC
  - The time when a forecast was issued
  - Actual wind direction in degrees
- Alternative weather conditions may be a challenge to display

Implementation Progress

- Weather Data Parser

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VANCOUVER/VANCOUVER
INTL/BOCella CVYR
26011002 0005G12KT 15SM
-SHBA SCT025 OVC040
07/04 A2944 RMK SFC50C5
SLP258+ METAR CVYR
2602002 080511G16KT15SM
-SHBA SCT025 OVC040
07/04 A2942 RMK SFC50C5
SLP263+ METAR CVYR
2603002 06005KT 15SM
-SHBA FEW025 BKN040
OVC055 07/04 A2941 RMK
SFC50C5 ROY VRY LGR
SLP259+ SPECI CVYR
2603122 05007KT 15SM
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Project Milestones

- March 1 - Proposal Submitted.
- March 5 – Paper sketch walkthrough with user completed. Feedback collected for re-design.
- March 15 – Weather data parser complete.
- April 7 – Early display functionality complete (timelines, clouds, min condition indicator).
- April 15 – High fidelity prototype complete (first iteration).
- April 21 – User evaluation and revised design complete. Final presentation.