

Final Report Presentation

IST 516
Fall 2013

Team 3

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CalendarWx

Project Overview

⦿ Time Saver

- Allow the user to plan ahead regardless of where he/she is going.
- Simplifies end-user responsibilities.

⦿ Data Fusion

- Allows multiple services to work together as one (Google Maps, Calendar, and NWS).
- Integrated scheduling and weather forecasts.

⦿ Appointment Location

- Google Calendar only provides weather for one default location.
- Forecasts only three days in advance.

And Our Name is...

CalendarWx

⦿ Our Motivation

- Applicability
- Fit our abilities
- Scope of assignment
- Timetable
- Interest in Google Services

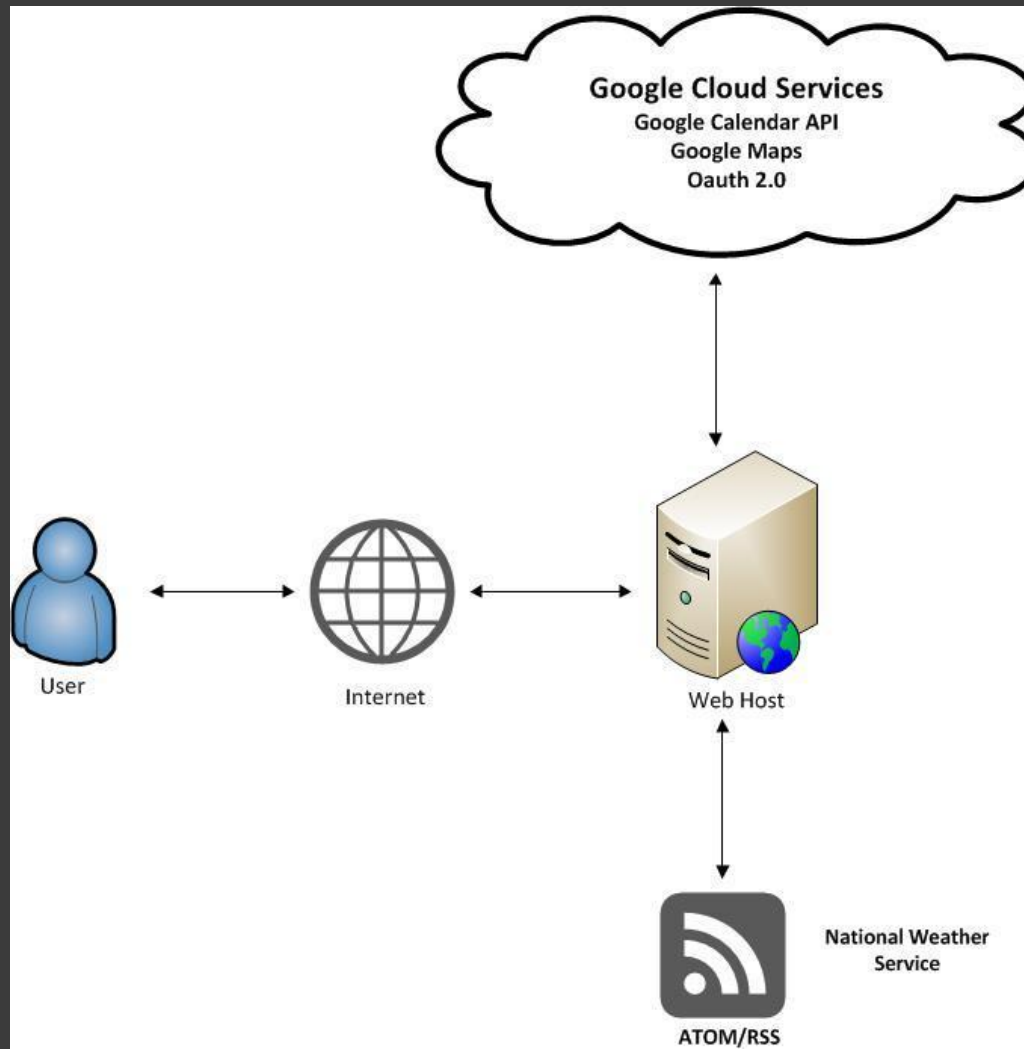
Just what is CalendarWx

- Web app that...
 - Retrieves the user's Google Calendar appointments.
 - Extracts the latitude and longitude of appointments using Google Maps API, if a location is provided.
 - Retrieves weather from NWS according to the latitude and longitude provided by Maps.
 - Displays current local weather from a NWS ATOM/RSS feed.

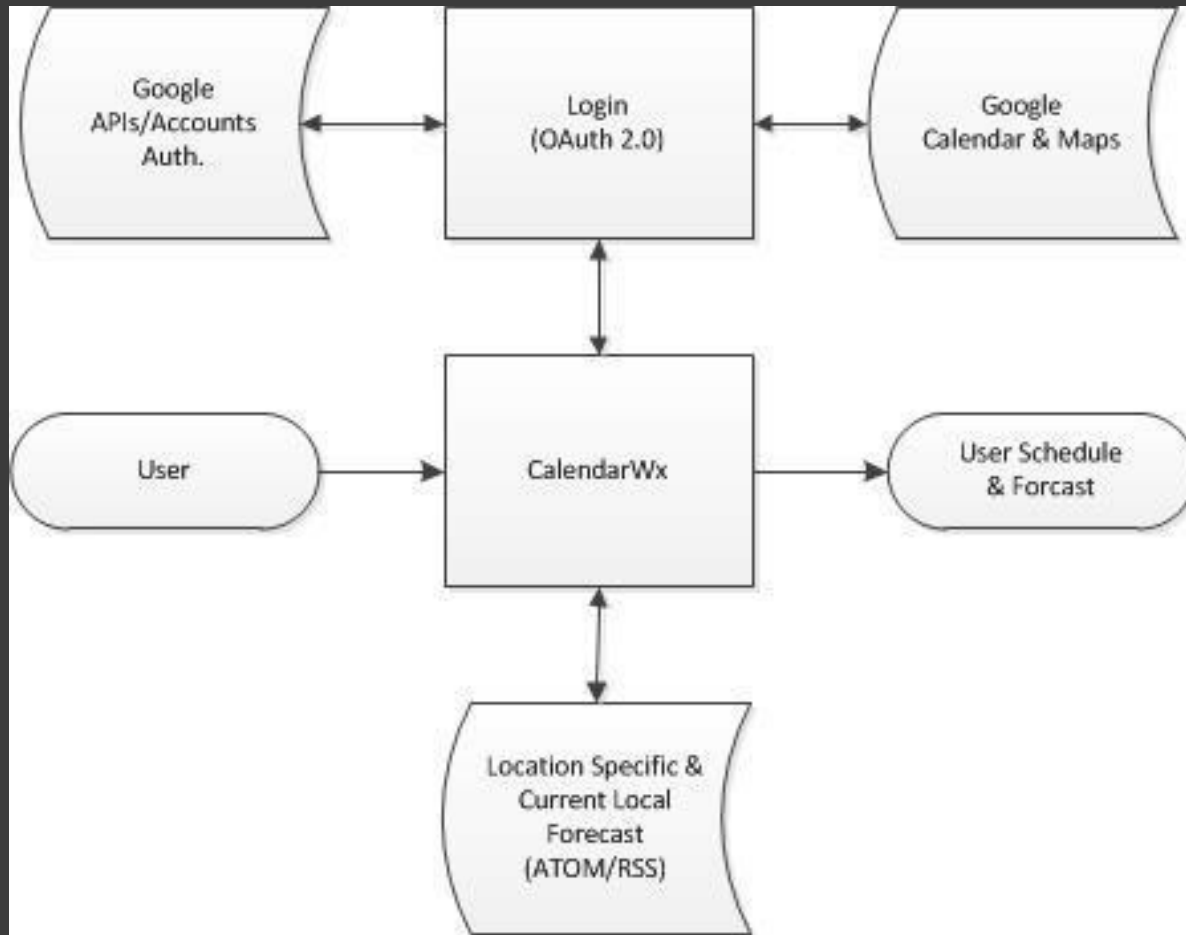
Tools of the Trade (Design) and Why

- ⦿ **Programming** (Python, Eclipse, HTML, XML, CSS)
- ⦿ **Technologies** (ATOM/RSS, Jinja2)
- ⦿ **Web Services** (Google App Engine, Google Calendar API, Google Maps API, OAuth2.0, National Weather Service)

Theoretical Architecture Design



Workflow Design



Special App Features

- Login with individual Google accounts.
- Display weather on calendar for date of appointments.
- Up-to-date weather announcements.
- Seven day forecast, potential for climate reports up to One year in advance.

Demo Overview

- ◉ Snapshot of Google Calendar
 - Contains an agenda list
 - Notice travel to multiple cities.
- ◉ View of CalendarWx
 - Contains agenda view of events
 - Weather information included

Demo Google Calendar

The screenshot displays the Google Calendar web application. The browser's address bar shows the URL <https://www.google.com/calendar/render?tab=wc&pli=1>. The page header includes the Google logo, a search bar, and user information for '+Kirk'. A yellow banner prompts the user to 'Change time zone to (GMT-05:00) Eastern Time?' with options 'Yes', 'No', 'Never ask again', and 'Settings'.

The main content area is titled 'Calendar' and shows the current date as 'Wednesday, Dec 11, 2013'. Navigation buttons for 'Today', previous/next days, and view modes ('Day', 'Week', 'Month', '4 Days', 'Agenda', 'More') are present. A 'CREATE' button is located on the left.

On the left sidebar, there is a calendar grid for December 2013, with the 11th and 12th highlighted. Below the grid, the 'My calendars' section lists 'Kirk MacKenzie' and 'Tasks'. The 'Other calendars' section includes 'Canadian Holidays', 'Contacts' birthdays a...', 'Phases of the Moon', and 'US Holidays'.

The main calendar view displays a list of events:

- Wed Dec 11, 2013**: 4:00pm – 5:00pm, Outdoor Ice Skating - Boston, MA
- Fri Dec 13, 2013**: 3:00pm – 4:00pm, Christmas Concert - Boston, MA
- Sat Dec 14, 2013**: 12:00pm – 2:00pm, Christmas shopping day - Boston, MA
- Tue Dec 17, 2013**: All day, Travel to Hometown - Chicago, IL, United States; Full moon 5:28am
- Tue Dec 24, 2013**: All day, Travel to Hometown - Chicago, IL, United States; Visiting Hometown - Chicago, IL, United States
- Wed Dec 25, 2013**: All day, Visiting Hometown - Chicago, IL, United States; Christmas Day; Last quarter 9:48am
- Thu Dec 26, 2013**: All day, Visiting Grandparents - Virginia, United States; Boxing Day
- Fri Dec 27, 2013**: All day, Travelling to Boston - Boston, MA, United States
- Wed Jan 1, 2014**: All day, New Year's Day; New moon 7:14am
- Tue Jan 7, 2014**: All day, First quarter 11:39pm
- Thu Jan 16, 2014**: All day, Full moon 12:52am

CalendarWx Intro

- The top of the CalendarWx app shows the latest weather at a users current location.
- CalendarWx app extracts events from Google Calendar
- The scheduled event is added and the weather for the event is retrieved
- After the weather data is retrieved an agenda view is created

Demo of CalendarWx

Calendar Wx Agenda - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Calendar Wx Agenda

localhost:10080

Google

CalendarWx Agenda View

Weather at Boston, Logan International Airport, MA - via NOAA's National Weather Service

Winds are from the Northwest at 12.7 gusting to 19.6 MPH (11 gusting to 17 KT). The pressure is 1023.0 mb and the humidity is 26%. The wind chill is 15. Last Updated on Dec 12 2013, 12:54 pm EST.

Date	Scheduled Event	Location	Daytime Weather	Nighttime Weather
20131212-00:00:00		Boston,MA	Mostly cloudy, with a low around 20. West wind around 9 mph.	
20131212-06:00:00		Boston,MA	Sunny, with a high near 27. Northwest wind 9 to 14 mph.	
20131212-18:00:00		Boston,MA	Partly cloudy, with a low around 19. Southwest wind 9 to 13 mph.	
20131213-06:00:00		Boston,MA	Mostly sunny, with a high near 30. West wind 11 to 16 mph.	
20131213-18:00:00	Christmas Concert	Boston,MA	A slight chance of snow after 4am. Mostly cloudy, with a low around 17. West wind 6 to 8 mph. Chance of precipitation is 20%.	
20131214-06:00:00		Boston,MA	Snow likely, mainly after 10am. Cloudy, with a high near 27. Chance of precipitation is 70%.	
20131214-18:00:00	Christmas shopping day	Boston,MA	Rain and snow before 4am, then snow and sleet. Low around 26. Chance of precipitation is 90%.	
20131215-06:00:00		Boston,MA	Rain, snow, and sleet likely. Cloudy, with a high near 33. Chance of precipitation is 70%.	
20131215-18:00:00		Boston,MA	Partly cloudy, with a low around 19.	
20131216-06:00:00		Boston,MA	Mostly sunny, with a high near 27.	
20131216-18:00:00		Boston,MA	Partly cloudy, with a low around 7.	
20131217-06:00:00	Travel to Hometown	Chicago,IL	Partly sunny, with a high near 33.	
20131217-18:00:00	Travel to Hometown	Chicago,IL	Mostly cloudy, with a low around 19.	
20131218-06:00:00	Travel to Hometown	Chicago,IL	Partly sunny, with a high near 28.	