Context-Aware Activity Notification System
Activity Awareness in Sakai: Improving the social nature of learning

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Big Ideas

- Rapid advances in technology capabilities
- Dramatic transformation of our understanding of human learning
- Social computing & social learning
Brief History of CANS

- Shadow netWorkspace
- Amelung’s dissertation
- Sakai implementation
- Use at MU…social ability
- FIPSE funding
- Use at Other Universities
  - Univ. of Michigan
  - Rice Univ.
  - East China Normal University
Why Social?

- Motivation
- Modeling
- Navigation
- Development through social interaction
- Facilitation (team work)
- Social capital
How Social?

• How do we act together?
  – Identity formation
  – Accountability
  – Places

• Social information
  – Social awareness (who)
  – Action awareness (what)
  – Activity awareness (how)
  – Tasks not just operations
Big Picture

CANS with the Sakai Learning Management System

SAKAI LMS

SAKAI MEMBERS

instructor

student

researcher administrator developer

CANS DATA

system activity analysis

activity visualization charts & plots

Email Digest

Interactive Webpage

Homepage Widget

?
Roles in CANS

- Learners
- Project members
- Instructors
- Administrators
- Researchers
From: cans@cansaware.com
Subject: CANS notification digest for Sunday, June 8, 2008
Date: June 9, 2008 12:40:24 AM CDT
Cc: tom@school.edu

CANS notification digest for Sunday, June 8, 2008

FIPSE-CANS
http://sakai.umissouri.edu/portal/site/29af972d

Discussion
-------------------------------
Tom Crown  read "AMT Specs document" 20:07:18
Ann Anderson read "AMT Specs document" 20:27:32
Diane Park  read "AMT Specs document" 22:29:24
Chris Young read "AMT Specs document" 22:32:03

Resource
-------------------------------
Ann Anderson read "AMT_v2.doc" 20:07:32
Chris Young read "AMT_v2.doc" 22:29:43
Tom Crown  created "flexDrmo.png" 22:30:58
Diane Park  read "wow.jpg" 22:31:49

Chat
-------------------------------
Diane Park  posted a message 19:32:31
Tom Crown  posted a message 19:32:39
Ann Anderson posted a message 22:31:14
Tom Crown  posted a message 22:31:22
Viewers: Interactive Webpage

1. Users can select view options – yesterday, last 3 days, last week.
2. When users mouseover an item in the chart legend, highlight the corresponding item in the bar chart.
3. **Member Visualization**: The bar chart shows activities of individual members and average.
4. **Activity Summary**: The table shows who did (posted/viewed) what when.
5. **Member Summary**: The table is the number version of Member Visualization. By clicking the table header, users can sort the summary table and bar chart.
**Viewers: Homepage Widget**

1. **Activity last 7 days**: The bar chart shows a personalized view of class activities – you, average and top 10%.
2. A mouseover of an item in the chart legend highlights the corresponding item in the bar chart.
3. **Hot topics last 7 days**: The table shows key discussion topics and resources.
4. Users can select the drop menu options – new resources, new discussions, most viewed discussions, most active discussions, most viewed resources.
5. Users can directly go to discussion pages or open resources by clicking titles.
Managers: Activity Monitor

1. **Activity Notifier List**: Users can manage notifications within Sakai LMS.
2. **Add Notifier**: Users can create their own custom notifier. They can select options for what information should be delivered to whom and when.
3. **Edit Site Setting**: Users can exclude events and/or members they do not want to monitor.
4. **Permissions**: Permissions allow users to access certain features of the Activity Monitor, depending on their roles and on the decisions made by the site owner.
5. **Edit Notifier Setting**: Users can edit their own notifiers anytime.
### Managers: Researcher Tool

#### Jobs

<table>
<thead>
<tr>
<th>Job</th>
<th>Run Schedule</th>
<th>Output Location</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Daily</td>
<td>/var/adm/messag/xbox/3</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Test Job</td>
<td>Weekly</td>
<td>/usr/local/dev</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Sean</td>
<td>End of Semester</td>
<td>/usr/local/trash</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Teddy</td>
<td>Daily</td>
<td>/usr/local/developers/work/tesr/Box3/FredBear/yogibear/tess</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Test</td>
<td>One Time</td>
<td>/usr/local/bear</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Tasty Buckets</td>
<td>One Time</td>
<td>/usr/local/buckets</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Joe</td>
<td>One Time</td>
<td>/usr/local/bob</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Chitty</td>
<td>Daily</td>
<td>/bob/fred/doug/tom</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>tester</td>
<td>Weekly</td>
<td>test</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>SkippyFive</td>
<td>Weekly</td>
<td>/usr/local/buckets</td>
<td>Remove Edit</td>
</tr>
<tr>
<td>Sean's New Job</td>
<td>Monthly</td>
<td>/usr/local/output</td>
<td>Remove Edit</td>
</tr>
</tbody>
</table>

#### Jobs Data

- **Job Name:** Yes
- **Run Schedule:** Daily
- **Data Begin Date:**
- **Data End Date:**
- **Job Begin Date:**
- **Job End Date:**
- **Output Location:** /var/adm/messag/xbox/3

[Submit]
Status & what’s next?

• Design work
  – Easy & useful
• Research
  – Usability, usage, adoption & impact
• Collaborate
  – Cans aware.com
• Partner
  – Michigan, Rice, ECNU, VT, you?
• Disseminate
Contact Us

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CansAware.com
• Want to do a trial or field test in winter 09

• Interested – want to learn more
  – Potential value for my organization is …..
  – Concerns are …..

• Slightly interested – maybe later
  – Potential value for my organization is …..
  – Concerns are …..

• Not interested
  – Technical issues concern me
  – Do not see the value of the information
  – Other ____________