# Determining Relevancy:
## How Software Developers Determine Relevant Information In Feeds

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University of British Columbia

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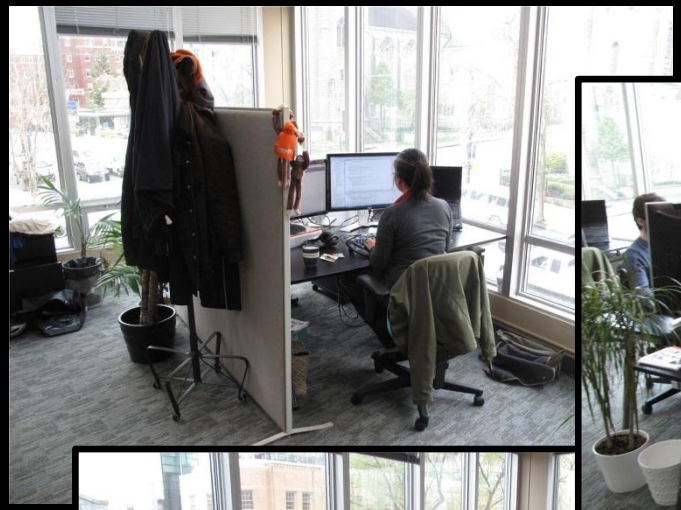
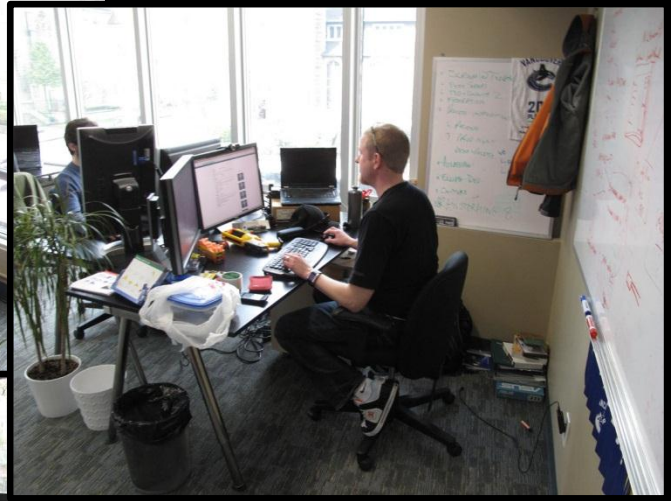
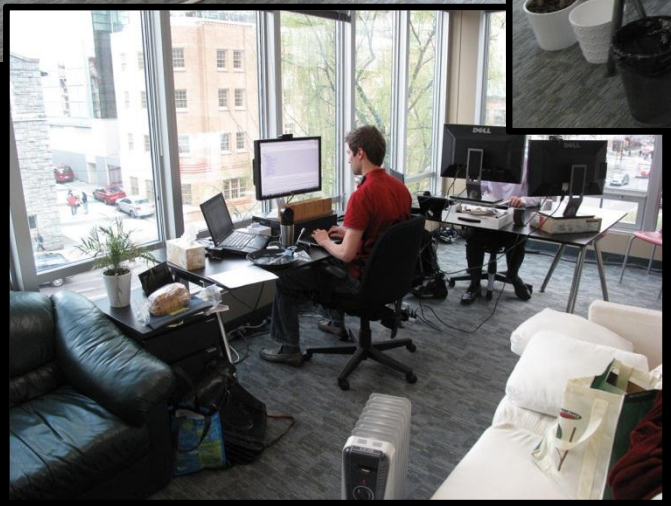
Liz



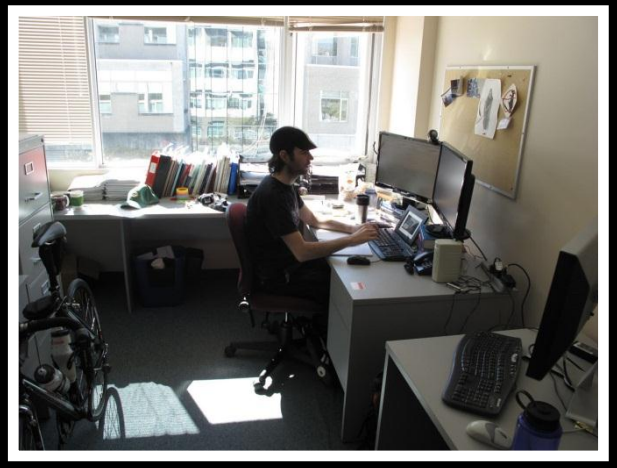
Alex

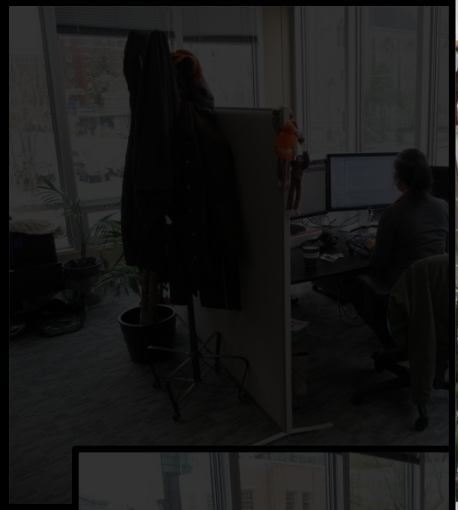


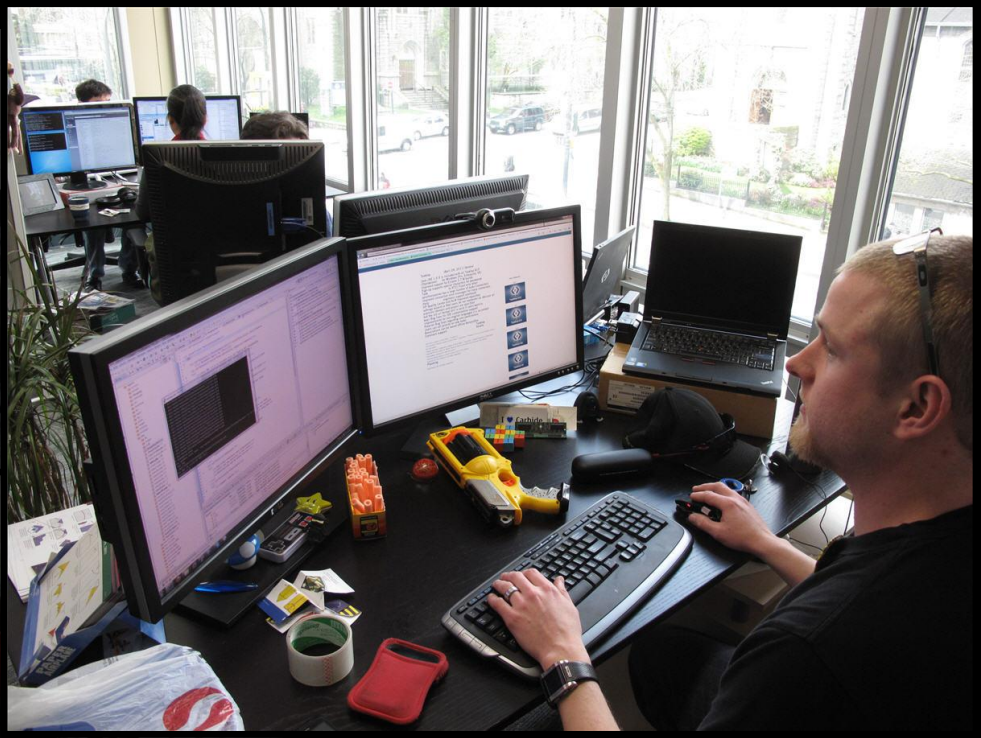


Ted

Joe







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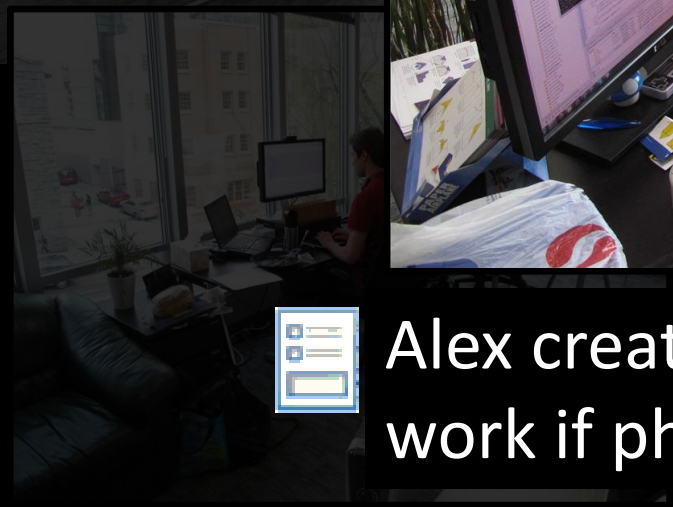

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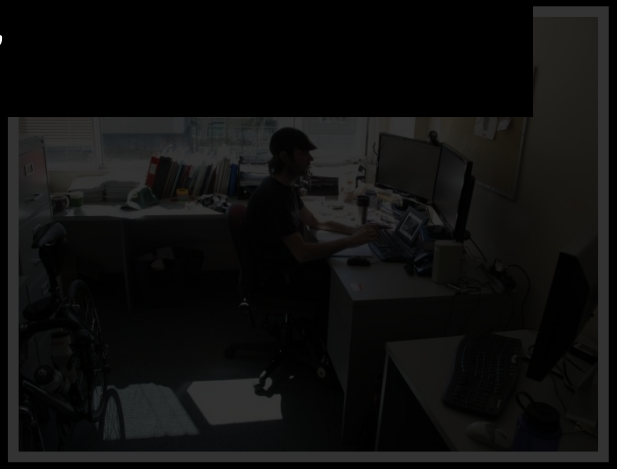

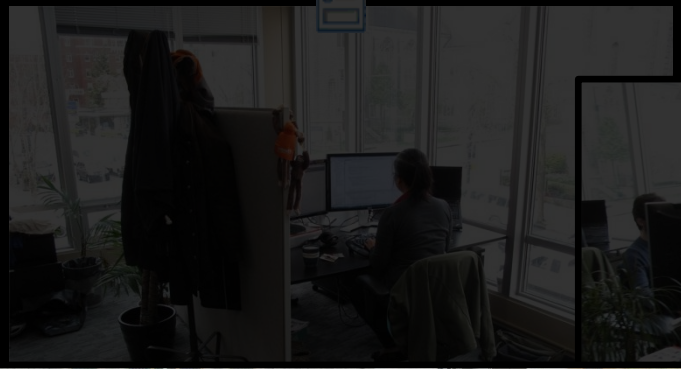

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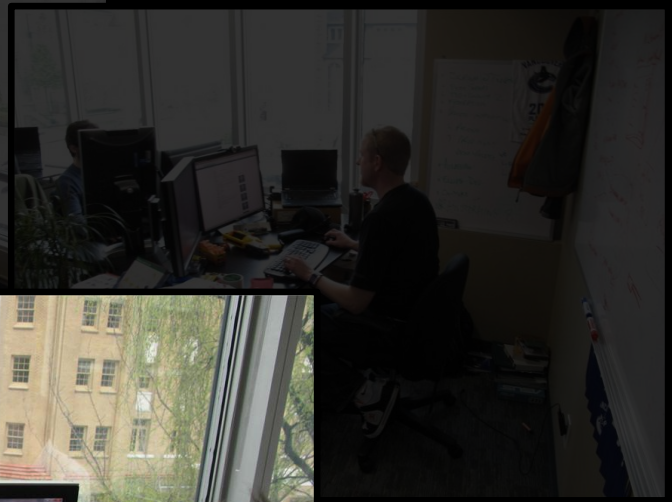

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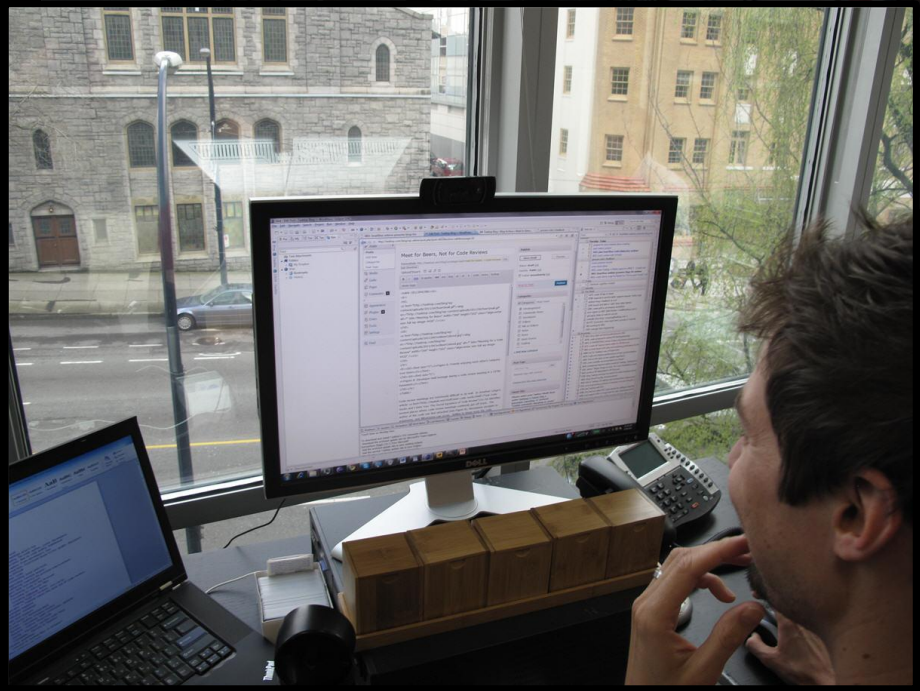

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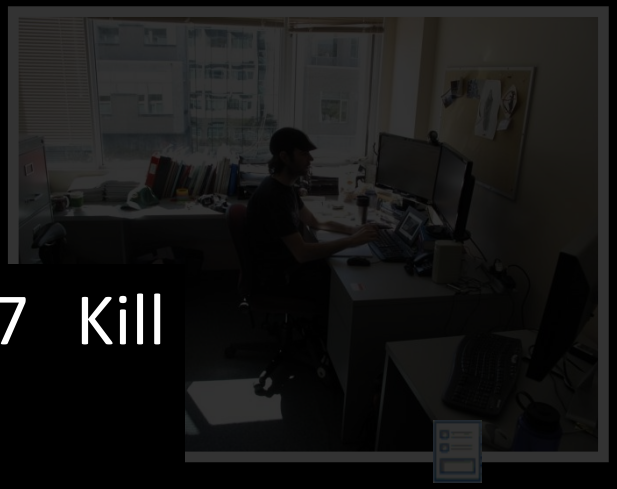
Joe



Ted delivered code for “2037 Kill alarm when call comes in”

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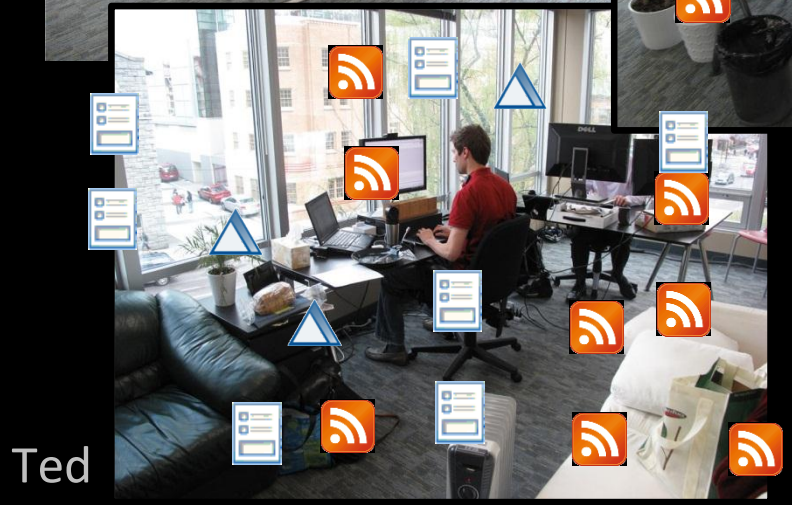


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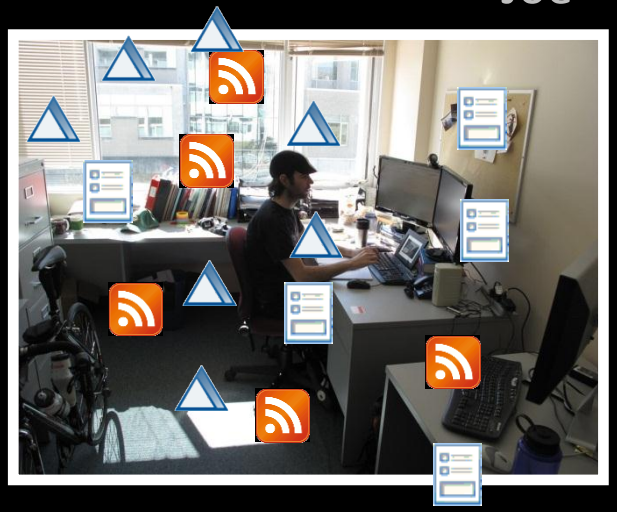
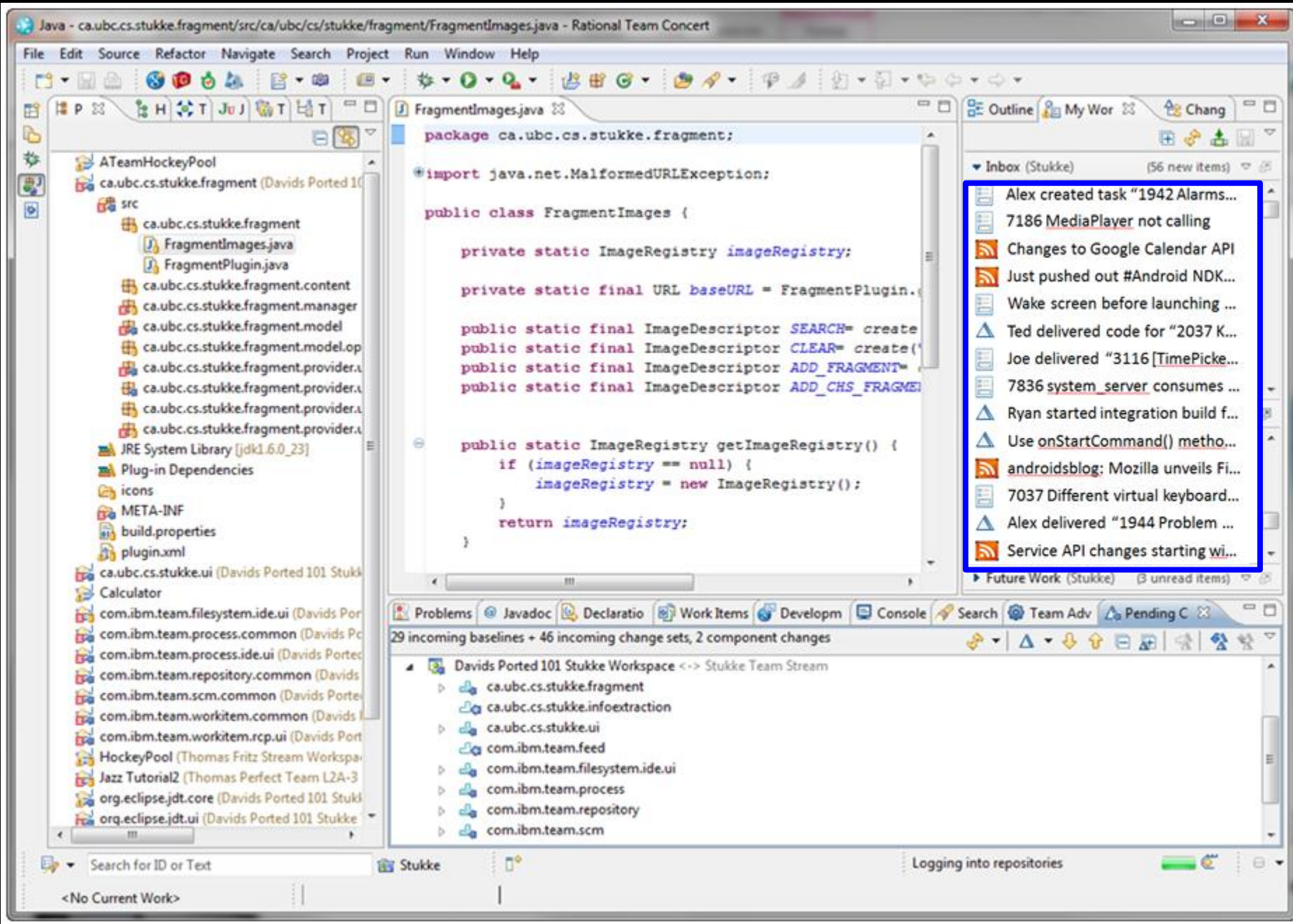



Each developer faces 50 new items a day for a single project


Java - ca.ubc.cs.stukke.fragment/src/ca/ubc/cs/stukke/fragment/FragmentImages.java - Rational Team Concert
File Edit Source Refactor Navigate Search Project Run Window Help
FragmentImages.java
package ca.ubc.cs.stukke.fragment;
import java.net.MalformedURLException;
public class FragmentImages {
private static ImageRegistry imageRegistry;
public static ImageRegistry getImageRegistry() {
if (imageRegistry == null) {
imageRegistry = new ImageRegistry();
}
return imageRegistry;
}
Outline
My Wor
Chang
Inbox (Stukke)
(56 new items)
Alex created task "1942 Alarms...
7186 MediaPlayer not calling
Changes to Google Calendar API
Just pushed out #Android NDK...
Wake screen before launching ...
Ted delivered code for "2037 K...
Joe delivered "3116 [TimePicke...
7836 system_server consumes ...
Ryan started integration build f...
Use onStartCommand() metho...
androidsblog: Mozilla unveils Fi...
7037 Different virtual keyboard...
Alex delivered "1944 Problem ...
Service API changes starting wi...
Future Work (Stukke)
(3 unread items)
Problems
Javadoc
Declaratio
Work Items
Developm
Console
Search
Team Adv
Pending C
29 incoming baselines + 46 incoming change sets, 2 component changes
Davids Ported 101 Stukke Workspace <-> Stukke Team Stream
ca.ubc.cs.stukke.fragment
ca.ubc.cs.stukke.infoextraction
ca.ubc.cs.stukke.ui
com.ibm.team.feed
com.ibm.team.filesystem.ide.ui
com.ibm.team.process
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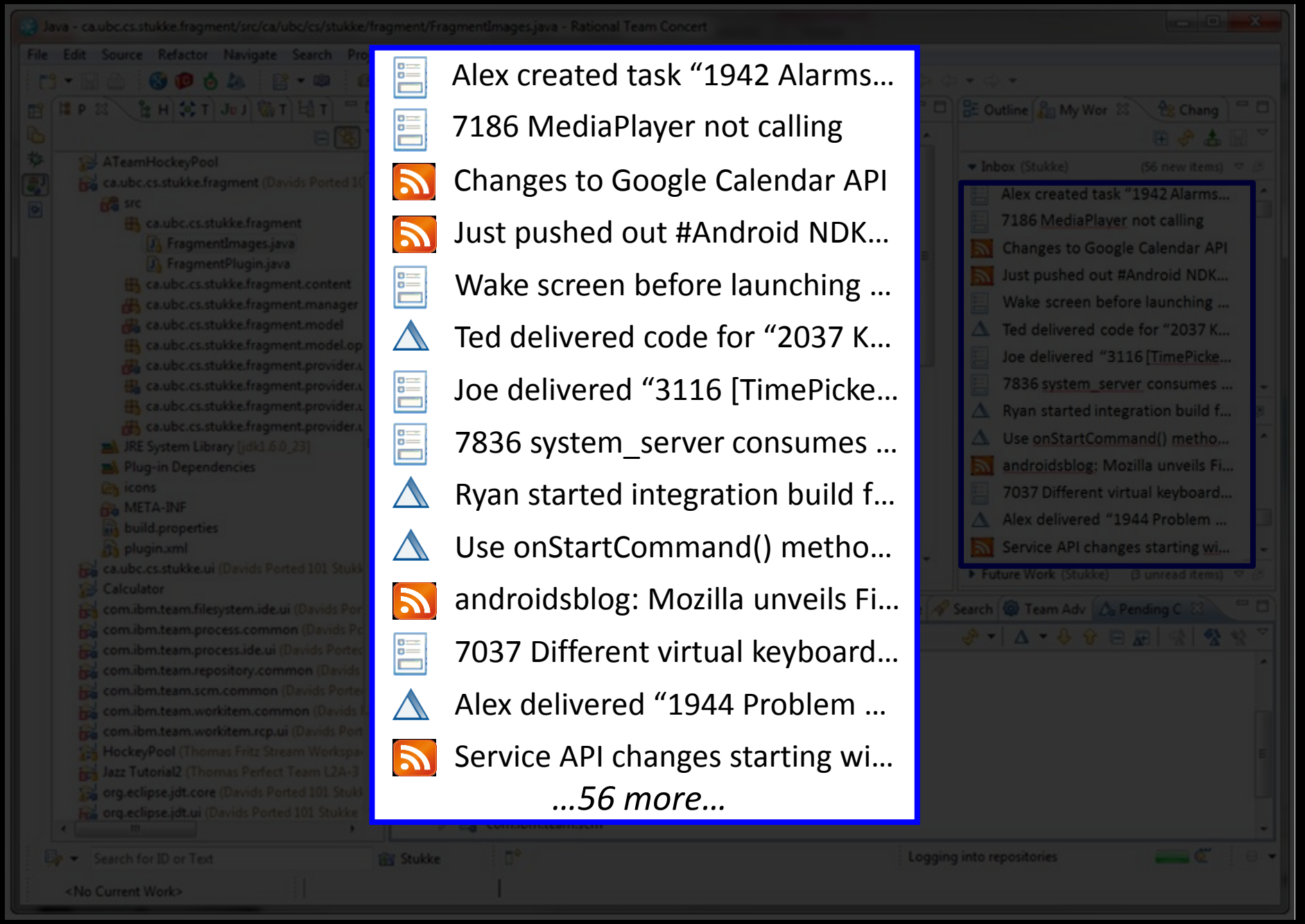
com.ibm.team.scm
Search for ID or Text
Stukke
Logging into repositories
<No Current Work>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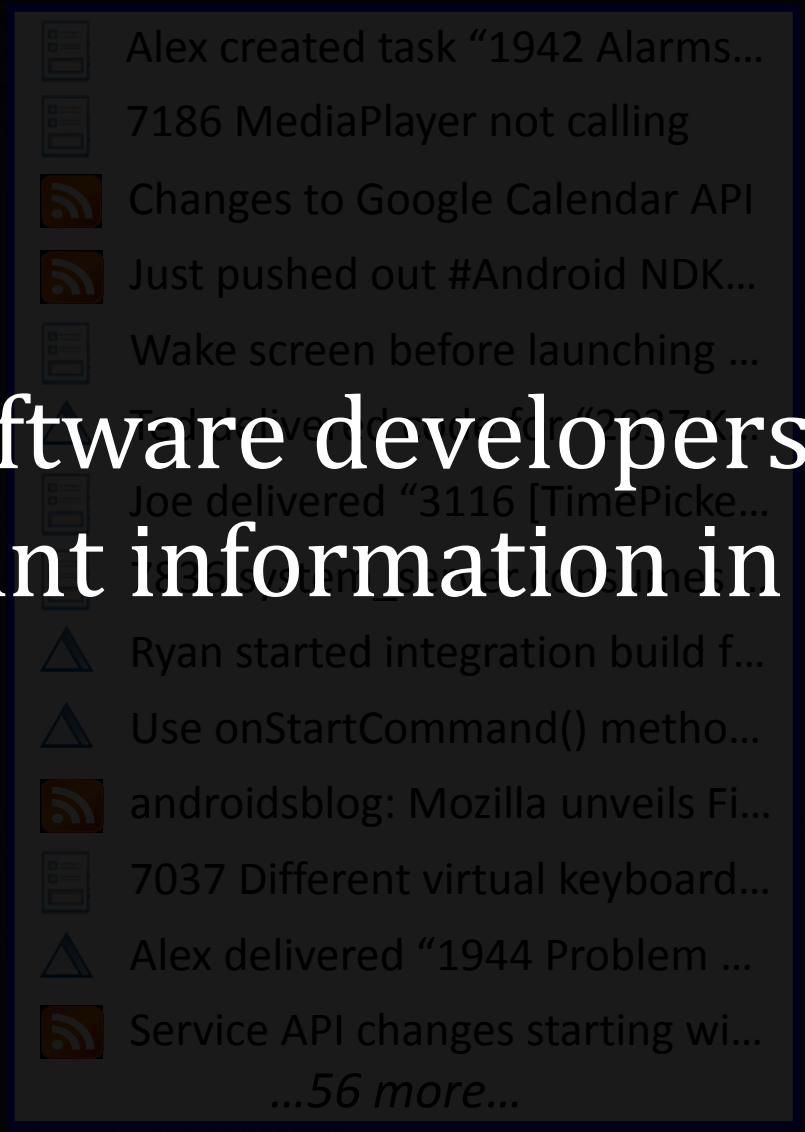
…56 more…




# How do software developers determine relevant information in feeds?

# Interview-based Study

5 professional developers, using a project environment with feeds

2 interview sessions per developer, each 20 – 60 minutes, four days apart

30 recent and randomly selected news items per session from 2 feeds (change set and work items)

- Developer statements for each item on relevancy

27% of items relevant, 8% somewhat, 65% not relevant

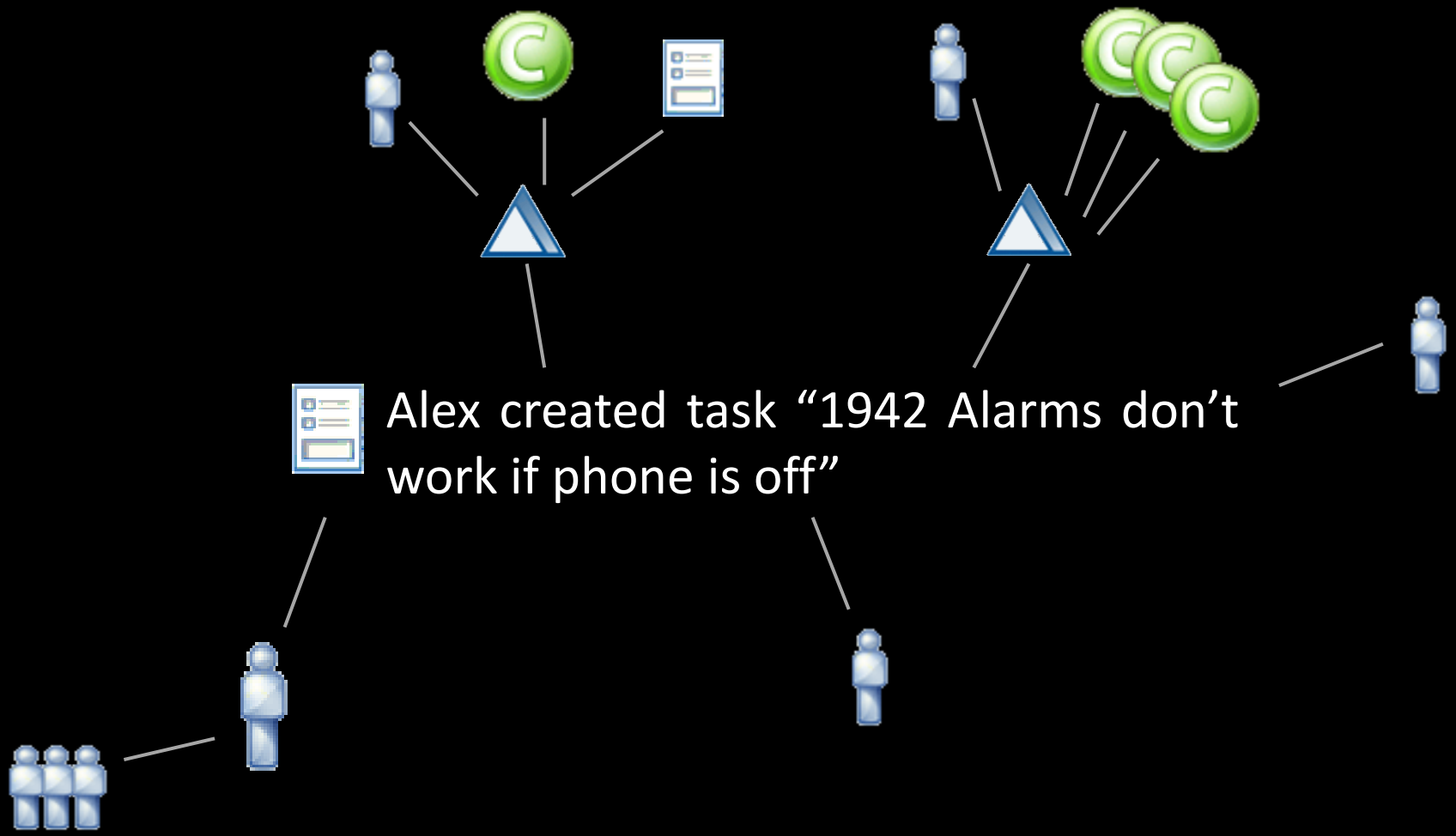
# Reasons for Identifying News Items as Relevant or Irrelevant

- Content
- Target of Content
- Previous Interaction
- Relation with Creator

Alex created task "1942 Alarms don't work if phone is off"

Ted delivered code for "2037 Kill alarm when call comes in"

# Information in a Project Environment



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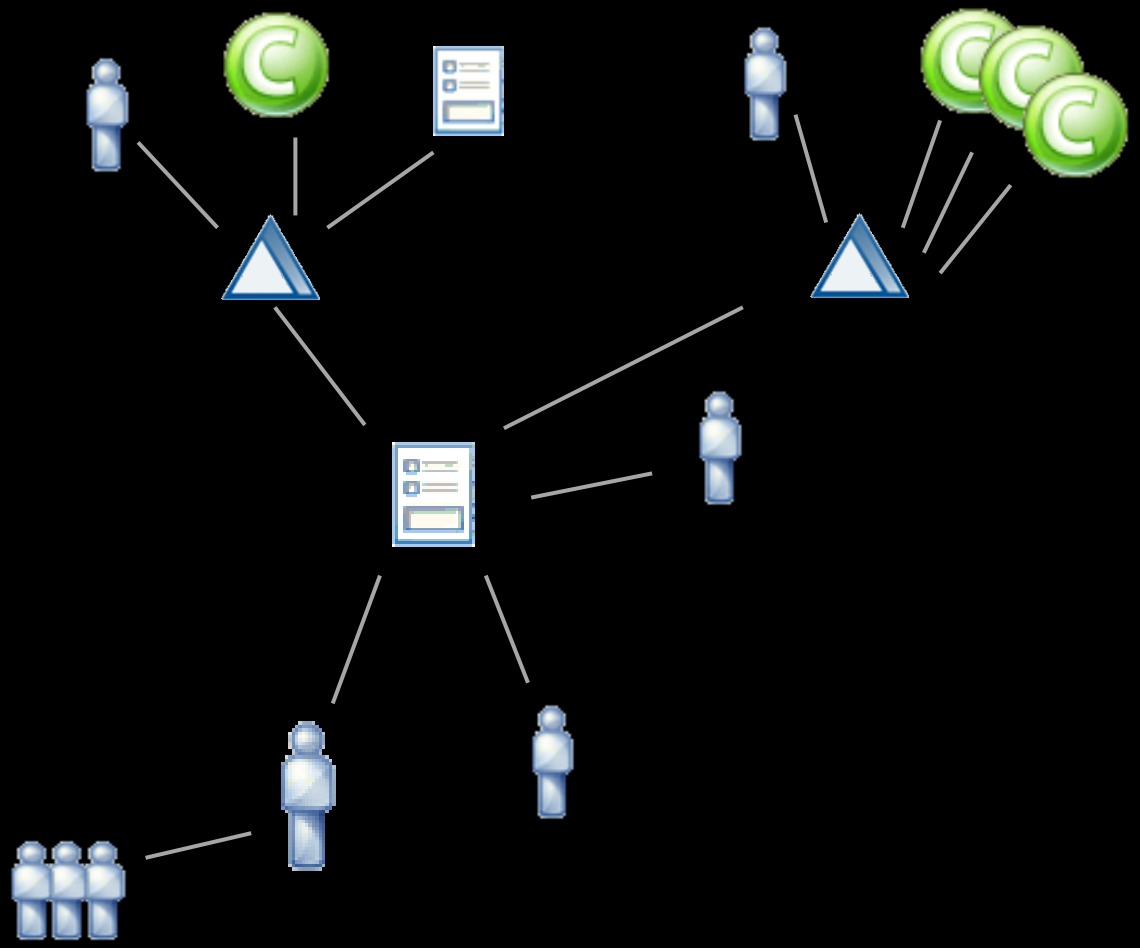

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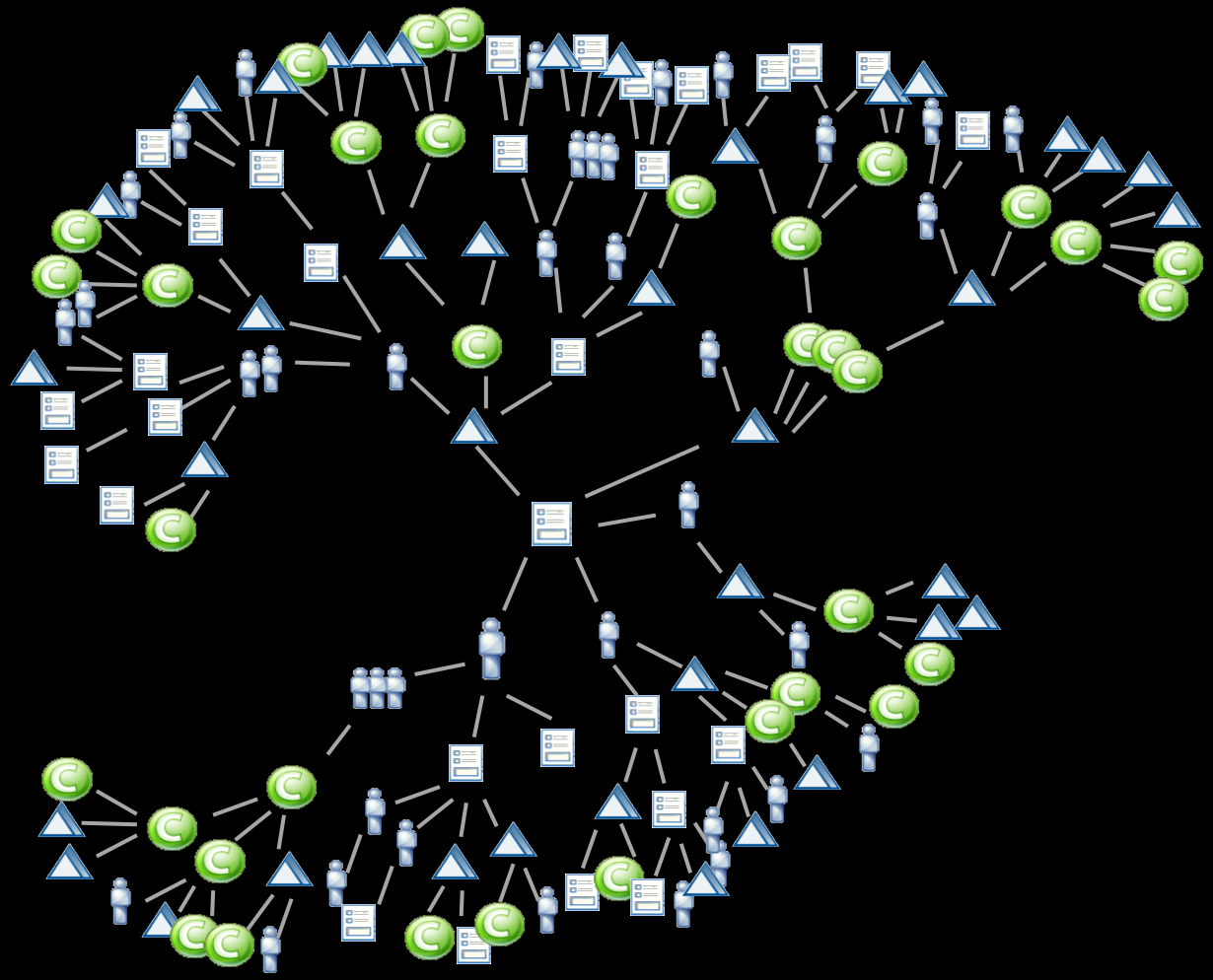
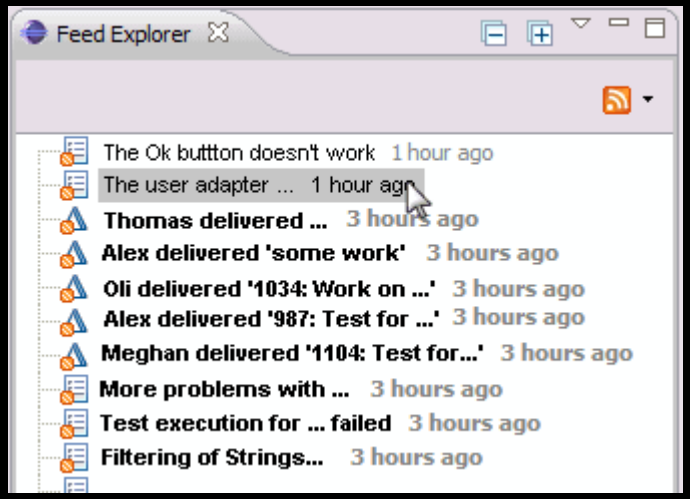
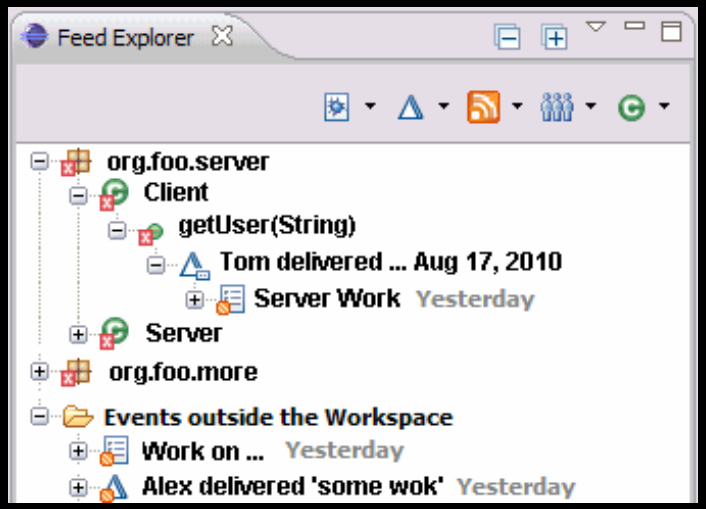


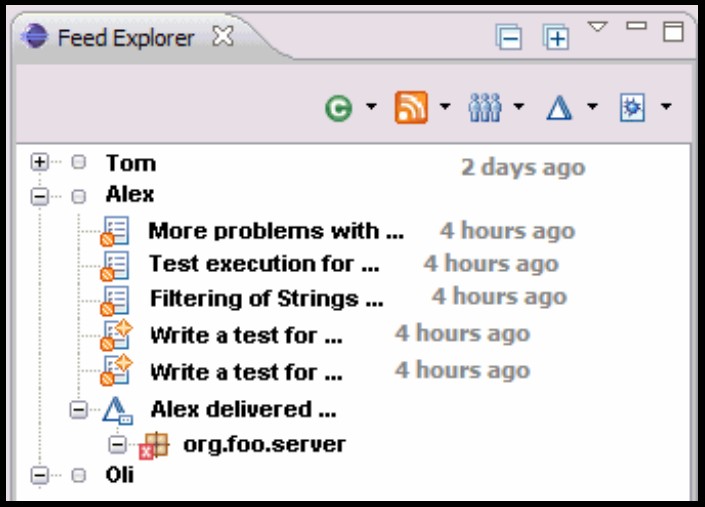
# Context to Ease Relevancy Determination
## (Second Session)




Work Context




Team Context



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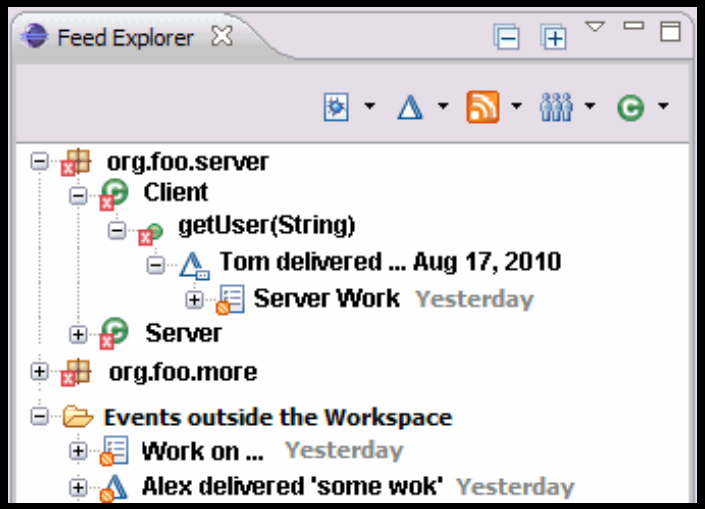
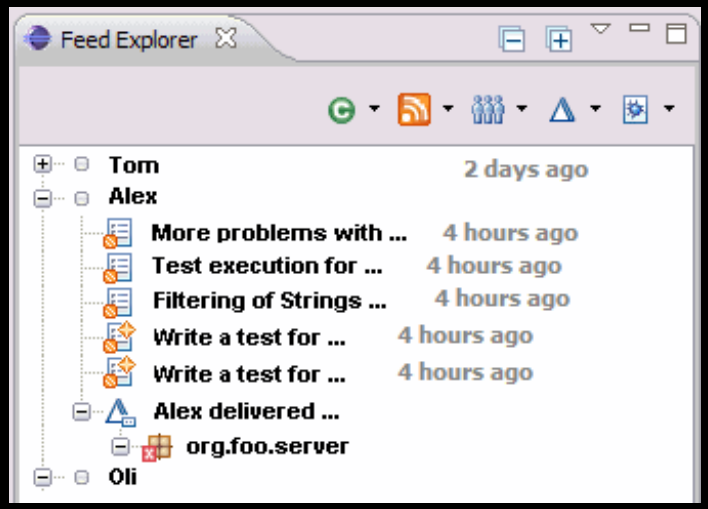



## Work Context (source code)

- Helpful for 79% of news items in context
- 60% participants conceived it as generally helpful




## Team Context

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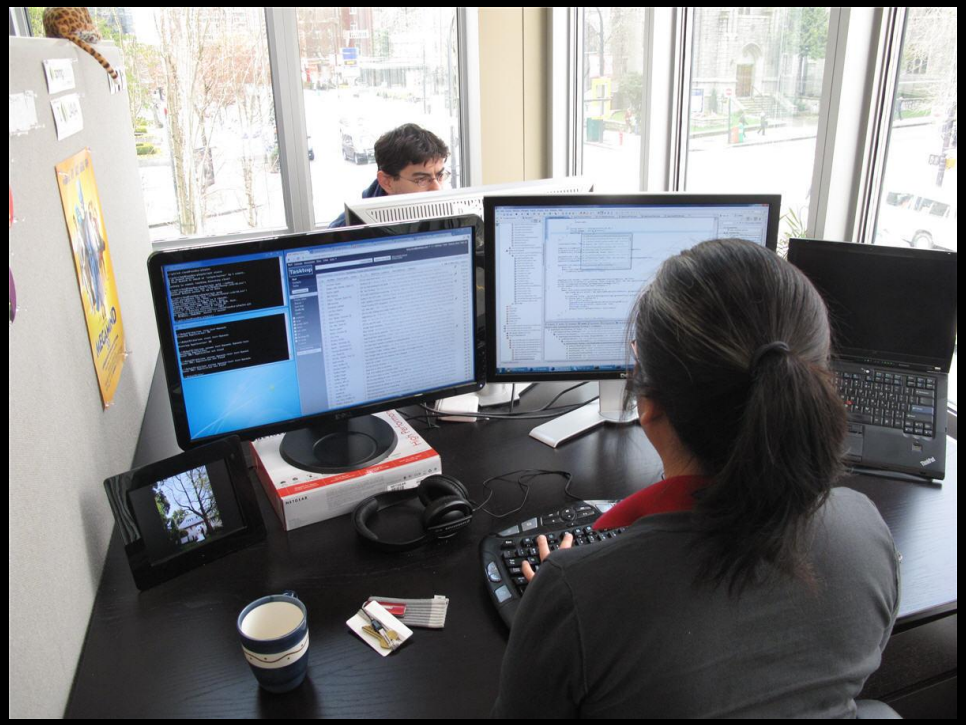
# Summary



Determination of relevancy (and irrelevancy) is individual and situation dependent

Structure of information can be used to provide context and ease determination