

## Experiment Two

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Participant id: Kate Heapel

Participant first, last name:

Kate Heapel

Block: Yellow

Please direct your browser to <http://sourceforge.net/>

Login name: xemplar

Password: exemplar2009

In the end of this experiment, please write your comments below this line

Sourceforge is a good option if you are looking for large implementations for re-use. It isn't web-suited for finding smaller blocks of code because the keywords don't properly reflect them.

As a general note about this study - I am finding it not realistic because normally I would do multiple searches, refining keywords until I feel like I am properly targeting what I want. Here, we are stuck with one set of search terms.



# Task

Create an application that loads and parses HTML documents and creates a DOM tree. The application should traverse the tree, retrieving the values of the HTML attributes and elements en route. In addition, the application should enable users to create and modify HTML documents by changing the DOM tree directly.

## Results

Please specify what keywords you used in your query:

HTML Dom tree traverse change

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Javan web HTML Presentation Technology	1	No code for accessing Dom. <sup>creating!</sup> Doesn't have examples of using DOM API
2	Streamlining XML	2	this is a DOM alternative method.
3	BeanDOM	1	used to access Java Beans, not HTML docs
4	JTidy	1	Parsing DOM parsing but not <del>could</del> <sup>could</sup> update to HTML documents. Source not available ... !!

5	Javast	1	Again, provides a DOM alternative rather than code for manipulating the DOM
6	CSSParser	1	Creates new DOM tree from CSS, rather than reading in HTML.
7	dom4j	1	Intended for Java beans, not HTML
8	Dom4j	1	Not related to target functionality
9	johne	1	Same description as Dom4j
10	SAXAdapter	1	Again, uses SAX rather than DOM.

# Task

Find an application that uses JavaBeans which uses the bound indexed property to determine property change in this application bean. The application should display some text in its GUI.

## Results

Please specify what keywords you used in your query:

javabeans bound indexed

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	SwingBean burkele Jenkins Component	1	Alternate implementation - <del>as per</del> irrelevant.
2	Ubermapper	1	totally irrelevant.
3	Random Java Utilities	1	doesn't have the functionality that we are seeking
4	Open Groupware.org	1	Irrelevant
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	Bean Action	2	related but not directly relevant
6	Patchilla: JDBC: Java Beans	3	Could potentially be very useful
7	Hierarchical map	1	completely irrelevant
8	Embedded Garbage Collector	1	Irrelevant
9	iScreen	2	Related but not directly relevant
10	HTML Parser	3	may be applicable. Looks like potential for reuse

# Task

Implement an application that performs pattern matching operations on a character sequences in the input text files. The application should support iterating through the found sequences that match the pattern. In addition, the application should support replacing every subsequence of the input sequence that matches the pattern with the given replacement string.

## Results

Please specify what keywords you used in your query:

String Manipulation Searching replacing

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	String Query	3	Could accomplish the tasks listed but is intended as an alternative to native <del>string</del> string API functions which may not be performed
2	java util library & command line tools	4	This would work <del>very well</del> very well
3	Generatator	3	Very similar to intended coding task. Looks very useful.
4	reJ	1	Completely irrelevant.

5	Textile Manipulation Tool.	3	looks very usable
6	Simple String Search	3	Has search function but not replace function
7	stringutils	4	would be very useful and relevant
8	Bakeby DB Manipulation Tool	1	completely irrelevant
9	String Search	3	Alternative to native classes. If this is permissible, this works well.
10	Purioscape Cache Scribe.	1	Irrelevant.



# Task

Implement a library similar to a synthesizer that supports generating sounds. These synthesizers should support different transmitters (i.e., sends midi events) and receivers (i.e., receives midi events and interprets them).

## Results

Please specify what keywords you used in your query:

Transmit receive sounds midi

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Cole Sanding	4	looks perfect
2	Java Messaging API for Nagios	1	Irrelevant
3	Andi's	4	Looks very appropriate and usable.
4	Colair Controls	2	Very little potential for reuse - only slightly relevant.

5	MIDI Rules	2	Could be partially used
6	Clips	4	Looks highly relevant
7	Ringtone MIDI tools	2	Mostly irrelevant
8	MIDI Agent <del>and</del> System	3	Some portions highly relevant and usable.
9	Blink	2	Low relevance but some code may be usable.
10	USB-URIO	1	Irrelevant

# Task

Implement a library for handling security permissions in a database. The library should support creation of permissions, retrieval and checking permissions by clients, setting system-wide security permissions, retrieval of security permissions with the specified key, adding and removing providers and clients for various permissions.

## Results

Please specify what keywords you used in your query:

database permissions providers clients security

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Security Generic Framework	4	Looks perfect!
2	Jchat	2	Largely irrelevant but some small snippets could be usable
3	JDBFS	3	Very similar but not a perfect match
4	Team elements	3	Again, similar. Retrieves permissions, etc, but doesn't set them.

5	AutoClicker	1	Completely irrelevant
6	Providers	1	Completely irrelevant
7	Plash Policy Scanner	1	Irrelevant - Plash security, not DB security.
8	BioNing	1	Irrelevant
9	EZ Crypt	1	Security related but not database related.
10	Permission Sniffer	1	App Security / OS Security, not database security.

# Task

Implement a library for managing concurrent access to hash maps (i.e., the hash maps data structures should be simultaneously accessible by multiple client threads). The concurrent hash table map or table should support regular operations such as clear, contains, put, remove, replace, size, etc.

## Results

Please specify what keywords you used in your query:

Concurrent Hashmap

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	<del>app Workshop</del> Hashmap	4	Very highly usable
2	Java concurrent annotated	1	different usage. it unclear
3	CoDeck	1	different usage of concurrent
4	Concurrent Dev. Framework	1	not hash <sup>map</sup> specific

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# Experiment Three

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Participant id: Kate. Heupel

Participant first, last name: Katie Heupel

Block: **Yellow**

Please direct your browser to [http://www.xemplar.org/search/index\\_adv.jsp](http://www.xemplar.org/search/index_adv.jsp)

In the end of this experiment, please write your comments below this line

Searching for a specific library doesn't work very well! Seems like you need to know the naming convention for what you are searching for, would be helpful to have more guidance here.





# Task

Find applications that use glyph painting facilities to enable users to deal with a range of viewing options. The goal is to reuse found applications to create visual presentation of texts and fonts, some of which are foreign.

## Results

Please specify what keywords you used in your query:

glyph characters

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Waba for DS	1	Not applicable
2	Jazilla Project	2	uses relevant libraries for unrelated processing
3	Chutor	1	Only executable is provided
4	Draw SWF	4	looks very usable

5	htmlCharset	1	Not glyph-related
6	piDPS	1	Not relevant
7	zSMS	1	Not relevant
8	JCharacter Manager	1	Not relevant
9	McBilliards	2	uses relevant libraries for different function
10	ATMIL Entries	1	Not relevant.

# Task

Create a lightweight virtual machine that supports data transfers using clipboard. Data transfer feature of this machine can be implemented with the help of sun GUI support.

## Results

Please specify what keywords you used in your query:

Clipboard

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Waba for Dos	1	does not look relevant
2	Clipboard tool	3	Seems very relevant + usable
3	Runway Slide	1	doesn't look relevant
4	6CB Global Clip Board	11	Similar functionality but different implementation approach

5	Advanced Clipboard Manager	4	Perfect! Clipboard use-read/write plus GUI
6	FreeMind	2	Some clipboard functionality looks usable but overall largely irrelevant
7	Open Proj	1	Irrelevant
8	Testimony	1	Irrelevant
9	AG101	2	Some clipboard functionality looks usable but generally not very relevant
10	Pubclipse	2	Potentially very usable

# Task

Parse a Java source file and output the abstract syntax tree (AST). Allow the user to traverse and modify the AST with a graphical interface.

## Results

Please specify what keywords you used in your query:

*Click parse traverse "abstract syntax tree"*

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	NATA in Java	2	Some portions potentially usable
2	Code Sampling	3	Potentially highly usable
3	Java st	4	looks perfect
4	Joel	4	looks perfect

5	Reggy creator	1	not relevant
6	Velogen	1	not relevant
7	Tex Converter	2	potentially usable
8	Rip Saw	1	RegEx based not relevant
9	BNF for Java	1	not relevant
10	Jettgalm. Java	1	not relevant

# Task

Create a GUI application that shows data in dynamically modifiable tables that have scrollbars. These scrollbars can change their orientations in tables based on the number of rows and columns.

## Results

Please specify what keywords you used in your query:

GUI data

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Jasmine IDE	1	IDE - not relevant
2	toni	2	may have reusable components
3	edenLib	3	looks very promising
4	BSGP Analyzer	2	Potentially usable

5	MASOT- GUI	4	looks very relevant
6	Data Manipulator	4	Very relevant
7	Breezy	2	Potentially <del>usable</del> usable
8	MP Browser	2	Potentially usable
9	Java App Framework/ GUI editor	4	Very relevant
10	Benedetto Library Catalog System	2	Potentially usable



# Task

Implement a library for checking XPath expressions. The checker should support compiling XPath expressions, evaluating XPath expressions in the context of the specified XML document and returning the results as the specified type.

## Results

Please specify what keywords you used in your query:

evaluate XPath

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Psycho Path	4	Very usable / relevant
2	XML documents from XPath and it's data	4	" "
3	Jaxon	2	Not very relevant + listed as under construction
4	Navicore Java Libraries	2	Somewhat relevant

5	Mini xpath processor for J2ME	2	Relevant but intended for a different platform
6	XPath over XML Schema	2	Somewhat relevant
7	JEPi	1	Not relevant
8	Process Execution Engine	1	" "
9	Adaptive Planning express	1	" "
10	Hybrid Petri Net LCS Simulator	1	" "

# Task

Implement a simple drag and drop manager. The manager should specify when and how a drag gesture may occur and implement a set of handlers that shall be invoked in order to cause processing of the user's navigational gestures. The manager should also define and implement drag and drop protocol notifications. The drag and drop manager shall permit only one drag and drop operation at a time and shall reject any further drag and drop requests until the extant operation is complete.

## Results

Please specify what keywords you used in your query:

java.awt, dnd

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	eikarNgilas	1	doesn't seem related at all
2	opmchan workbook	1	" "
3	Java fractal platform	1	" "

4	Exercise Submission System	1	doesn't seem relevant
5	JDump Viewer	1	" "
6	EQUIP	1	" "
7	JPhotoAlbum	2	Small potential for reuse
8	MP3 dings	2	" "
9	Fluix GUI	1	doesn't seem relevant
10	RAWSON	1	" "

# Experiment One

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Participant id: Katie Heupel

Participant first, last name: Katie Heupel

Block: Yellow

Please direct your browser to [http://www.xemplar.org/search/index\\_new.jsp](http://www.xemplar.org/search/index_new.jsp)

In the end of this experiment, please write your comments below this line

The engine seems like a big improvement over just keyword searches, although more work is needed to eliminate false positives.

The first 2 scenarios I felt I didn't have deep enough technical knowledge to fairly evaluate so I focused on the others.



# Task

Create an application for sharing, viewing, and exploring large data sets that are encoded using MIME. The data sets may represent blogs or genome sequences. The data can be stored using key value pairs. The application should support retrieving data items by mapping keys to values.

## Results

Please specify what keywords you used in your query:

Retrieve data set MIME key value

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (completely irrelevant)	Your explanation of your ranking (a couple of sentences)
1	<del>Mime for DOS</del>	<del>3</del>	<del>Mime encoding/decoding source looks usable also includes packaging - sending - receiving</del>
2	<del>Mime - Dir and vCard Java API</del>	<del>3</del>	<del>MIME source usable</del>
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# Task

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Implement a library to support an affine transformation between vector spaces (i.e., affine vector spaces) using linear transformations (rotation, scaling or shear) and translations (shift).

## Results

Please specify what keywords you used in your query:

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3(mostly relevant), 2(most irrelevant), 1(compl irrelevant)	Your explanation of your ranking (a couple of sentences)
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# Task

Develop a universal sound and voice system that allows users to talk, record audio, and play MIDI records. Users should be able to open source connections with each other and communicate. A GUI should enable users to save conversations and replay sounds.

## Results

Please specify what keywords you used in your query:

MIDI play record talk

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	MyDI - Piano Tutor	3	Midi Kernel source includes highly relevant <del>code</del> source for sending/receiving/sequencing MIDI. No talk functionality.
2	Tux Guitar	3	Extensively accesses + writes MIDI files. No talk.
3	Rasmus DSP	2	Again, basic MIDI functionality - no talk.
4	<del>Let's</del> Let's Talk	1	No apparent MIDI functionality.

5	Code bundling	2	Another extensive MIDI-example looking Task
6	MidiQuick fix	4	Intended to edit existing MIDI files
7	testplot	1	No relevant code found.
8	Talk to the msc	2	Talk connectivity may be usable- Minimal MIDI support
9	MGTalk- Google talk for emulate	1	MIDI talk functionality usable
10	Talk Agent for msc	1	Not relevant- different interpretation of "talk"

# Task

Implement a library for representing and manipulating with BigDecimal numbers. A BigDecimal consists of an arbitrary precision integer unscaled value and a 32-bit integer scale. If zero or positive, the scale is the number of digits to the right of the decimal point. If negative, the unscaled value of the number is multiplied by ten to the power of the negation of the scale. The value of the number represented by the BigDecimal is therefore  $(\text{unscaledValue} \times 10^{-\text{scale}})$ .

## Results

Please specify what keywords you used in your query:

BigDecimal

Project number	Project title	Your relevancy ranking, one of: 4 (highly relevant), 3 (mostly relevant), 2 (most irrelevant), 1 (compl irrelevant)	Your explanation of your ranking (a couple of sentences)
1	Erigo	3	uses fixed decimal arithmetic function ability.
2	Rehmskater	4	uses BigDecimal in a different manner
3	Calculator	4	extensive use of Big Decimal
4	Todbox for Java JT open	4	uses Big Decimal in a different manner

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