

Building Sakai Tools in Google App Engine

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IMS Global Learning Consortium
www.dr-chuck.com



[http://drchuck.dyndns.org
/~csev/sakai-workshop/](http://drchuck.dyndns.org/~csev/sakai-workshop/)

www.appenginelearn.com

www.pythonlearn.com

www.activestate.com

My Goals for Today

- Talk about use cases and scenarios for non-enterprise “Learning Tools”
- Talk about Google App Engine
- Talk about the IMS Basic LTI Specification
- Show you how to add BasicLTI support to Sakai
- Show you how to build a Learning Tool in App Engine using the Tsugi framework


Background Task: Install App Engine

- Please install AppEngine and get the trivial application running while I am talking
- www.appenginelearn.com
 - Helper scripts
- Handouts
- Book Appendices

AppEngineLearn [Book](#) [Author](#) [Python](#) [App Engine](#)

These are supporting materials for the O'Reilly book titled [Using Google App Engine](#). This book is aimed at people who want to gain skill in web programming in general and the Google App Engine. The book has been used to support many beginning courses ranging from High School to College. As such there are chapters on Python, HTML, CSS, and HTTP. More advanced programmers will likely want to skip over the first few chapters.

I see Google App Engine as a way for virtually everyone to have their own interactive software-based web site regardless of their level of programming skills. Increasingly, web programming will simply need to be a competency like mathematics and this book is dedicated to teaching everyone about Google App Engine.



- You can download the [Sample Applications](#) from the book.
- [Installing Python and JEdit](#) - We recommend using JEdit as your programmer editor and it will be used throughout the Podcasts.
- Installing the App Engine and writing your first Application.
 - Macintosh: ([Handout](#), [Screencast](#), [YouTube](#))
 - Windows Vista: ([Handout](#), [High Quality Screencast](#), [YouTube](#))
 - Windows XP: ([Handout](#), [Screencast](#), and [YouTube](#))
- You may want to also download the [App Engine Helper Scripts](#). This is a script (one for Mac and one for Windows) that you put in your apps folder to launch the App Engine. These scripts simplify setting the paths, etc. There is a README.txt file in the ZIP describing how to use the utilities.

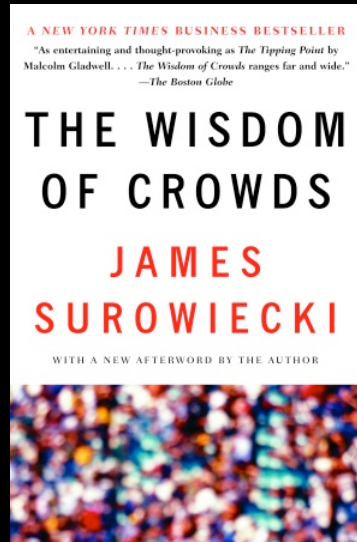


2008 Sakai Usage Data at University of Michigan

Scenarios / Use Cases

- Hobby Application - Support Users and Courses around the world
- Instructor built simple, interactive tools - Like Wisdom of Crowds
- Local Instructional Support Staff - Build one-off simple tool for a particular instructor

wiscrowd.appspot.com



ctools.umich.edu Logout

My Workspace | **SI 301 W09** | SI 791 W09 csev | SI 539 W08 | AMT P9 2009 | SI502 | SI502Staff | SI 502 W09 Paul | — more sites —

Simple Learning Tool Interoperability ?

Hello: csev@umich.edu (Instructor) from SI 301 W09


Thank you for your guess

Enter Guess:

Enter Name (opt):

Average: 105 Count: 1

csev@umich.edu, 105

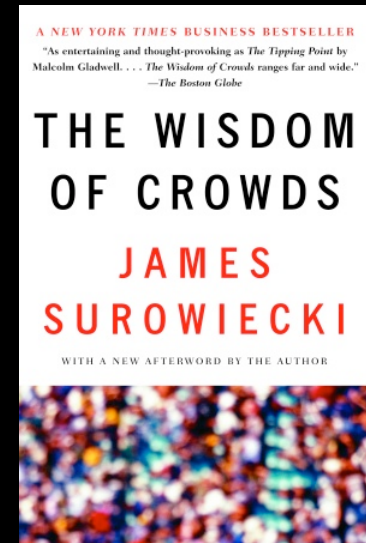


Home
Resources
Assignments
Email Archive
Calendar
Software
PythonLearn
Experiment
Wisdom
Site Info
Help


Users present:
Charles Severance

wiscrowd.appspot.com

- Log in with your GMail account
- Navigate to the Wisdom of Crowds Application
- We will come back to this later in the talk



<< back to portal [CloudCollab](#) [Logout \(drchuck\)](#)

Hello: drchuck (Instructor) from S1101 

Enter Guess:

Enter Name (opt):



"Collaborative eScience:
Evolving Approaches"



**PREVIEW
SLIDES**

? HELP

⏪ DONE

 Web Lecture
Archive Project

← GO BACK 1

GO AHEAD 1 →

00:00:00

slide 001

Collaborative eScience: Evolving Approaches

Charles Severance
Executive Director, Sakai Foundation

Shaping Collaboration 2006
Geneva, Switzerland
December 11-13, 2006



JUMP DIRECTLY TO SLIDE ↕

[synchronize video with current slide](#)

www.syncomat.com



Dr. Chuck Travel 2004-2006

Chuck's Goals for Sakai



Bring enterprise-level open source LMS into the Market



Collect bright worldwide developer community and achieve sufficient adoption for sustainability



Focus on ease of adding new tools



Create market to enable the free exchange of tools



Get teachers writing tools



Teach
Relax
Reflect
Recharge

2007-2008



Site Information Display ?

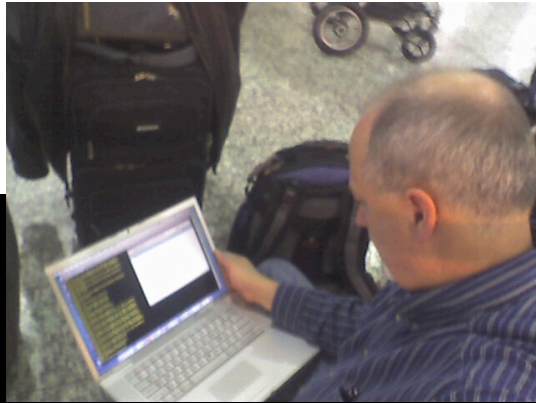
[Options](#)

- Home
- Assignments
- Test Center
- Gradebook
- Email Archive
- Site Info
- Help

Ctools site for Daniel Zhou's sections for W09:
502-3 29193 Group Session | Th 9-10:30 am, 412 WH | (Daniel)
502-8 29512 Group Session | Th 6-7:30 pm, 331 DENN | (Daniel)

Users present:

- Amanda Nichols
- Charles Severance



2007



Commercial

**Tools
Interoperability**



**Common
Cartridge**



Publishers

LMS

Open Source

Standards

2008

www.imslobal.org

Learning Tools Interoperability

- Content Integration

- McGraw-Hill Katana
- Pearson TPI
- K12 - www.k12.com
- Google Documents (SAML)

- LMS Integration


- Angel
- Sakai Porlet / Melete
- Moodle
- Microsoft MIRLearn
- Blackboard Building Block



wiscrowd.appspot.com

- Log in with your GMail account
- Navigate to the Wisdom of Crowds Application
- Lets guess some angles

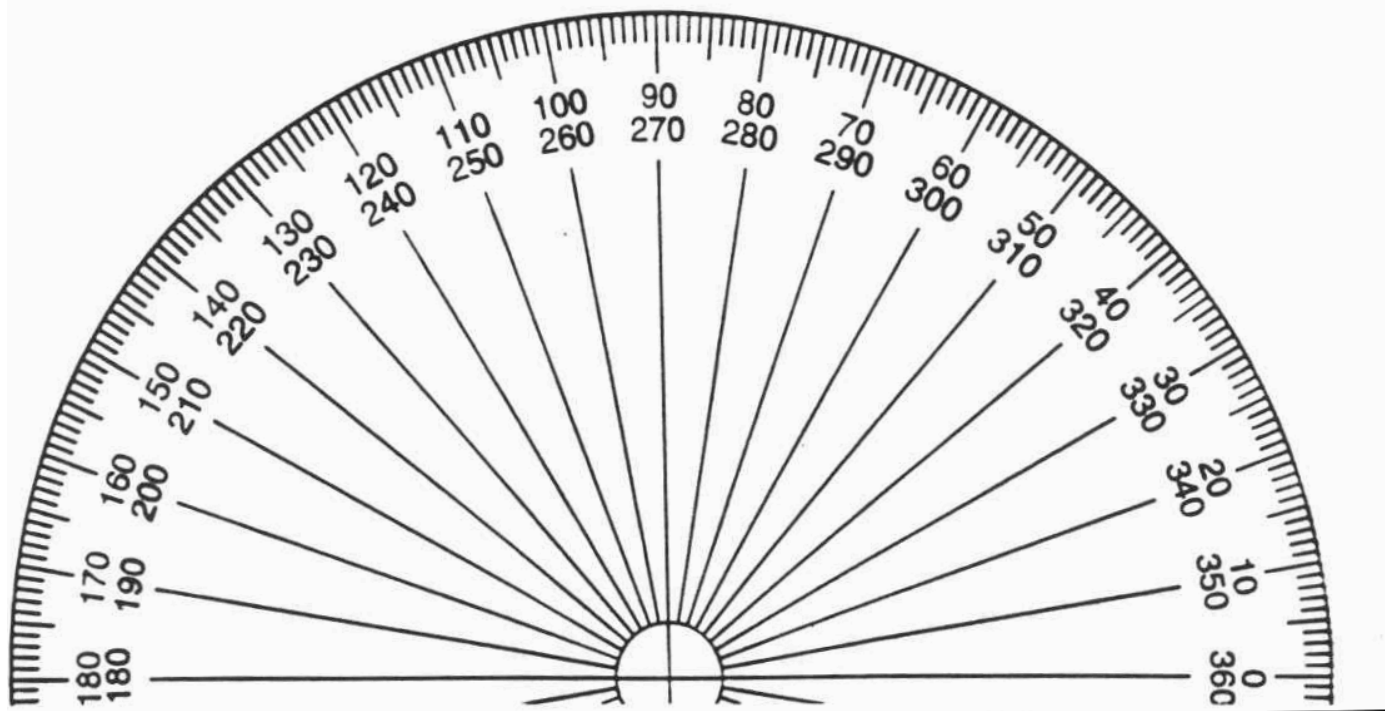
<< back to portal [CloudCollab](#) [Logout \(drchuck\)](#)

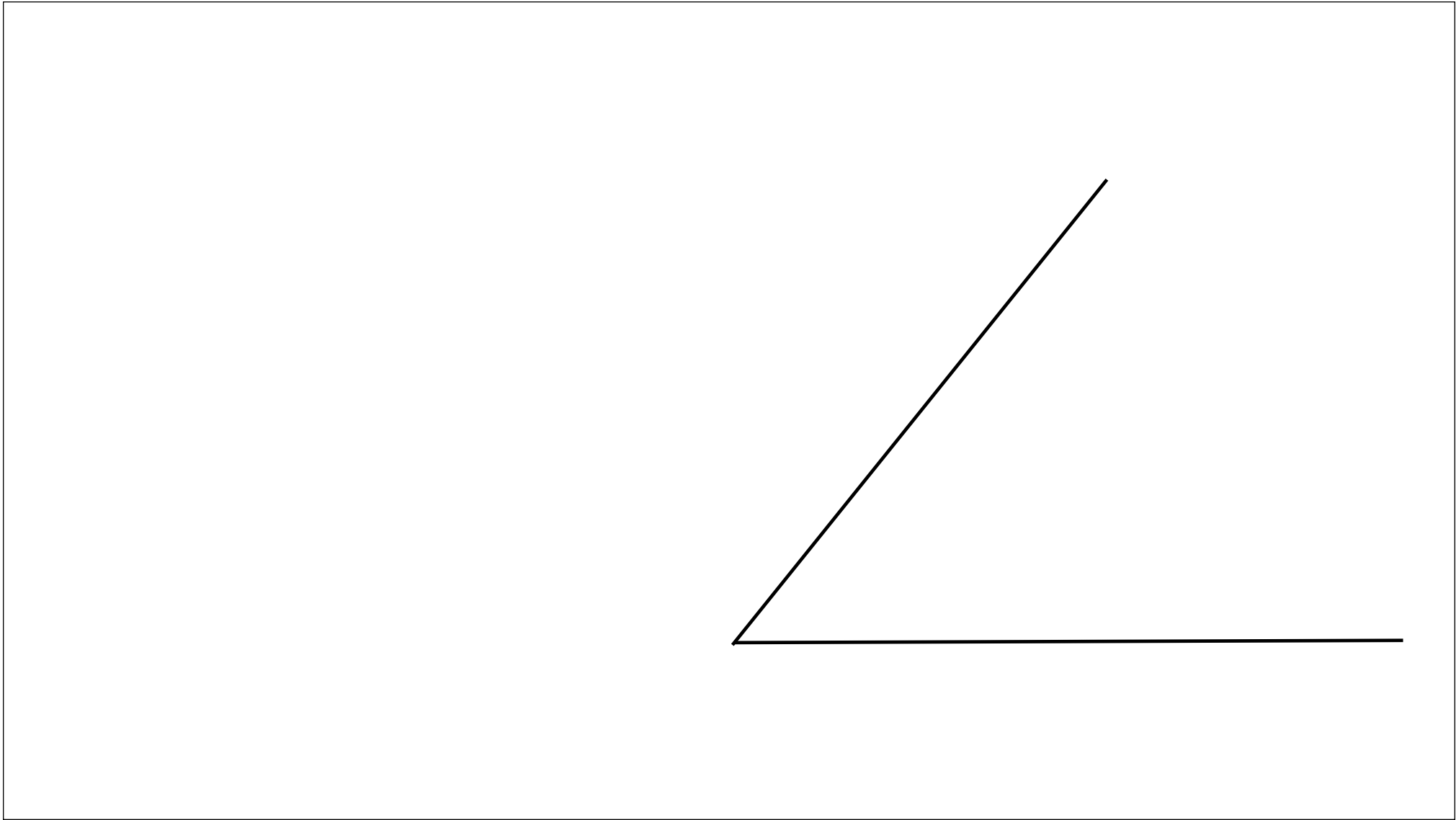
Hello: drchuck (Instructor) from SI101 

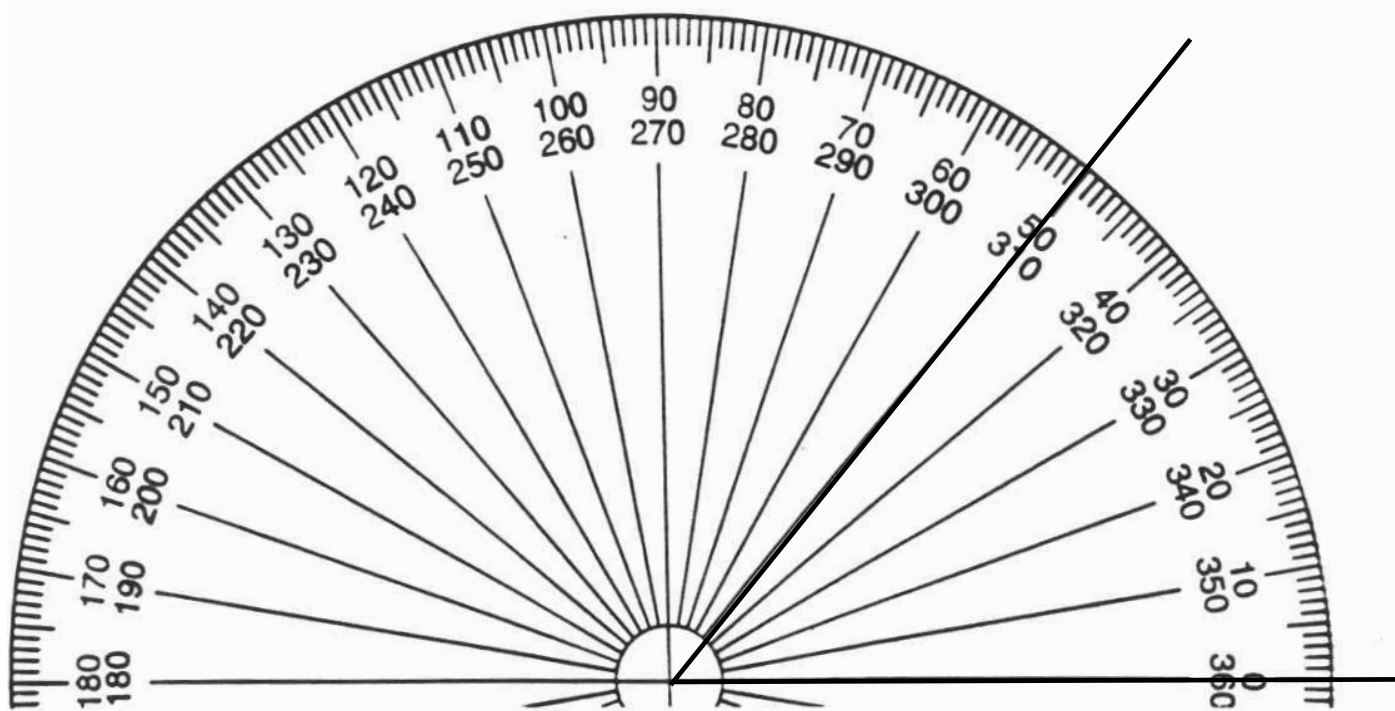
Enter Guess:

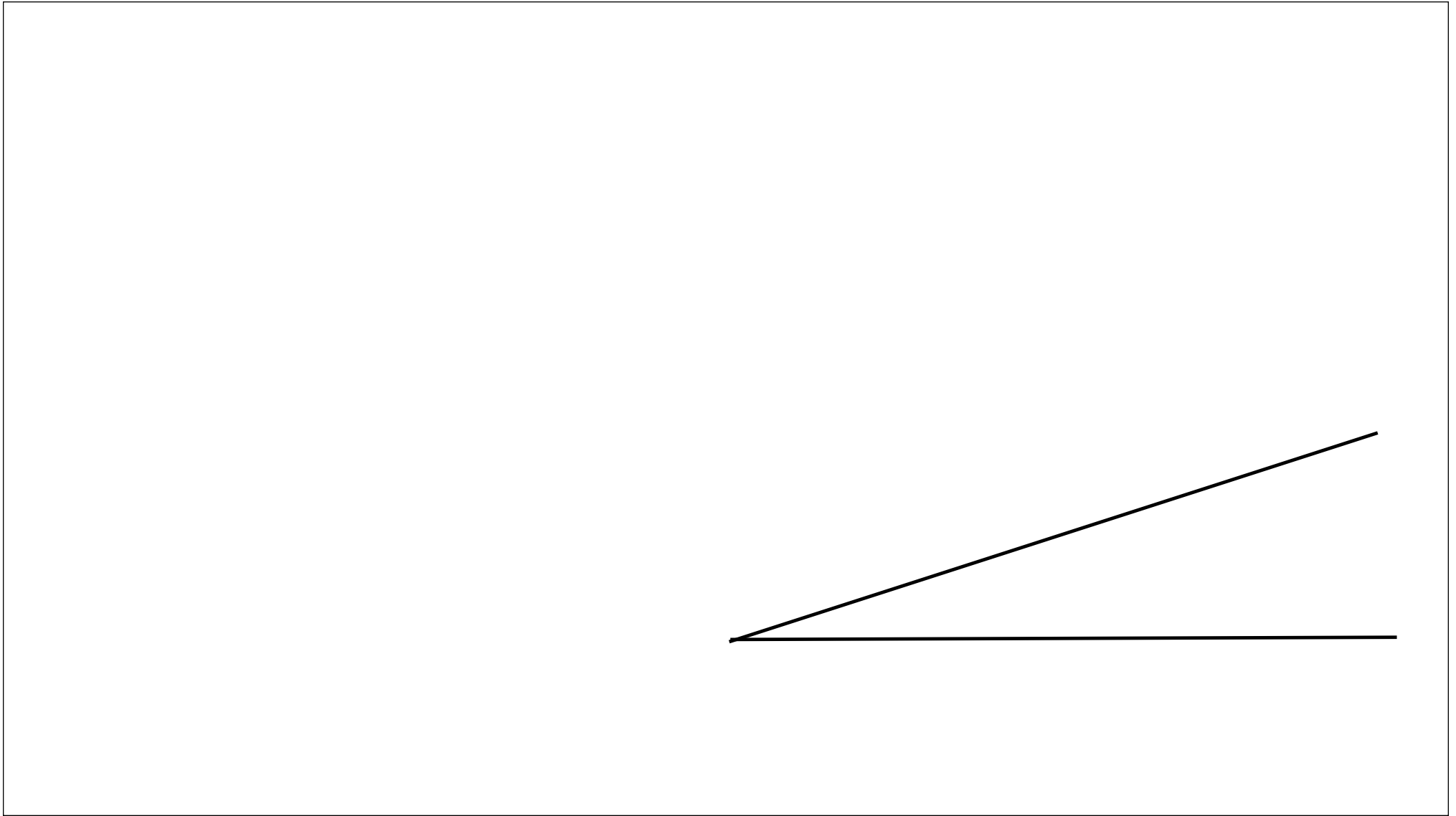
Enter Name (opt):

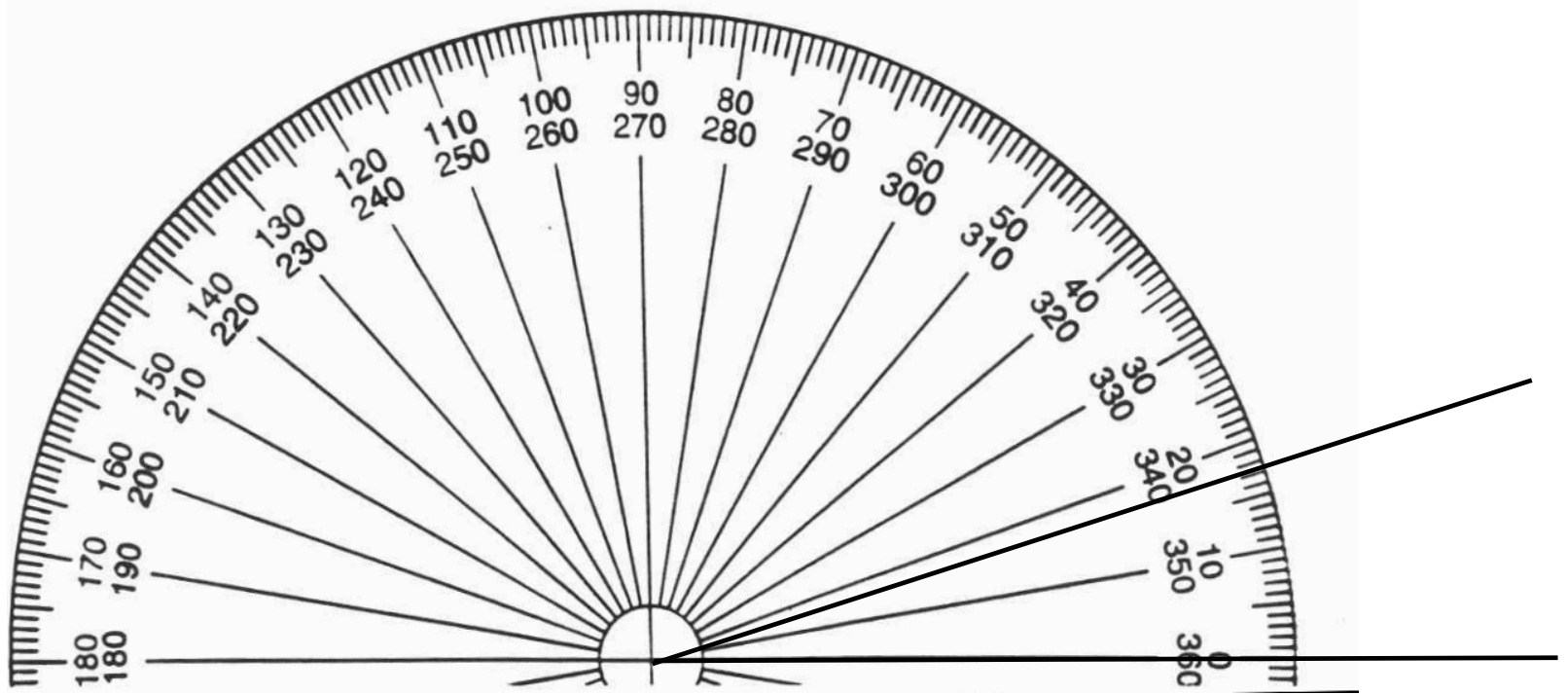


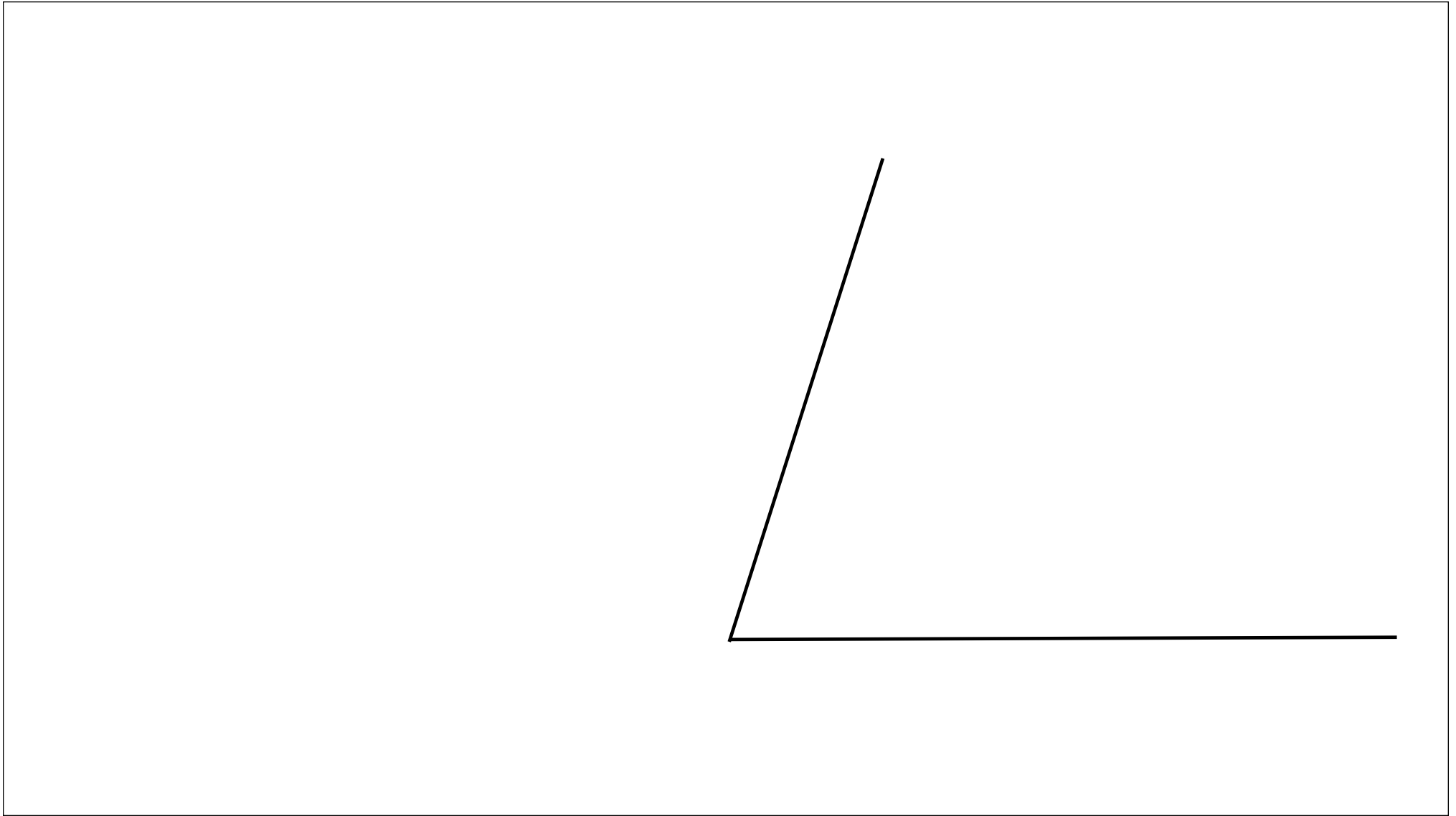


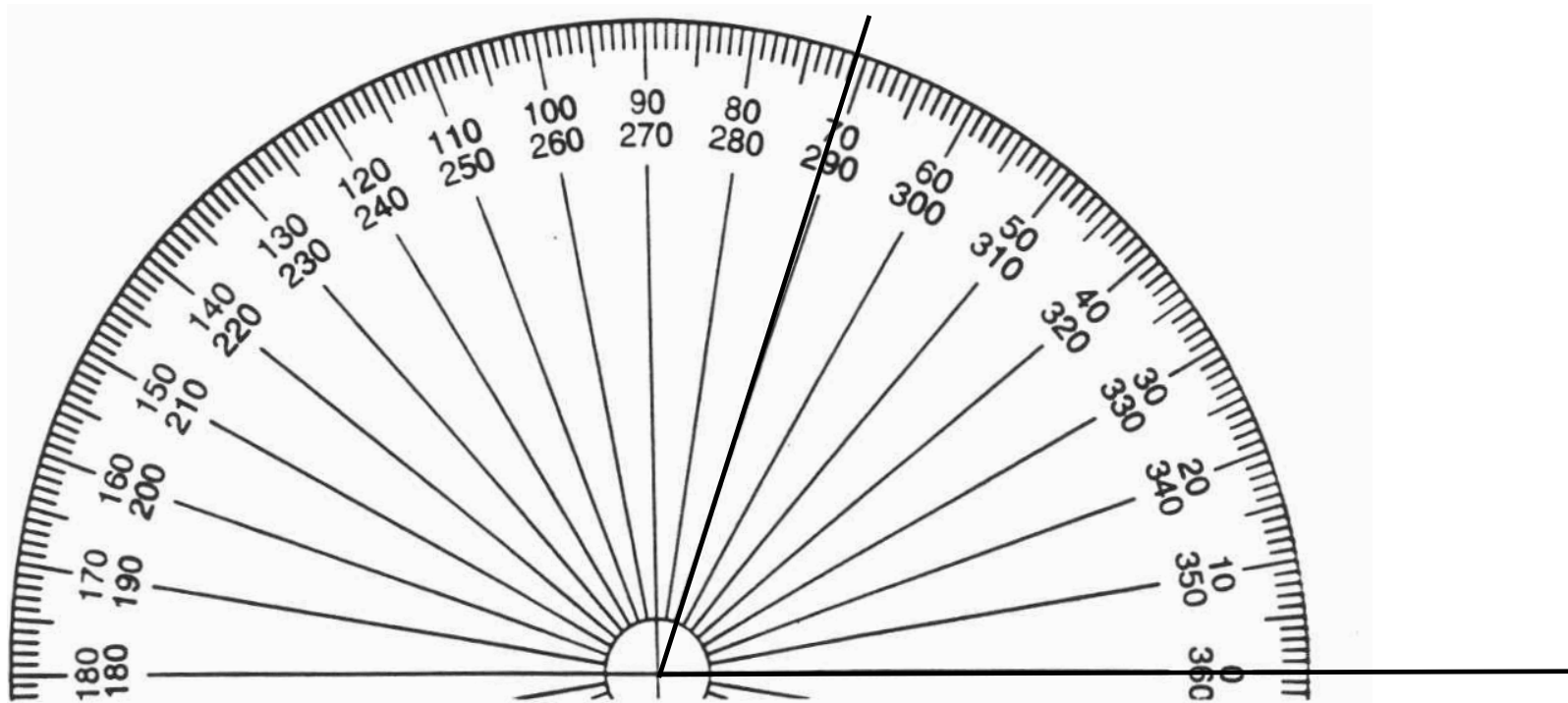












```
import logging
import pickle
from google.appengine.ext import db
from core.tool import ToolRegistration
from core import learningportlet

class Wisdom(db.Model) :
    blob = db.BlobProperty()

def register():
    return ToolRegistration(WisHandler, "Wisdom of Crowds")

class WisHandler(learningportlet.LearningPortlet):

    def doaction(self):
        wisdom = Wisdom.get_or_insert("a", parent=self.context.course)
        if wisdom.blob == None :
            wisdom.blob = pickle.dumps( dict() )
            wisdom.put()
        data = pickle.loads(wisdom.blob)

        name = self.request.get("name")
        if len(name) < 1 : name = self.context.user.email
        guess = self.request.get("guess")
        try: guess = int(guess)
        except: guess = -1
```

90 lines
of
Python



```
import logging
import pickle
from google.appengine.api import memcache

from core.tool import ToolRegistration
from core import learningportlet

def register():
    return ToolRegistration(WisHandler,
                           "Wisdom of Crowds", """"Game""")

class WisHandler(learningportlet.LearningPortlet):

    def doaction(self):
        wiskey = "WisCrowd-"+str(self.context.course.key())
        data = self.getmodel(wiskey)

        name = self.request.get("name")
        if len(name) < 1 : name = self.context.user.email

        guess = self.request.get("guess")

        try: guess = int(guess)
        except: guess = -1
```

80 lines
of
Python



```
msg = ""
if self.context.isInstructor() and name.lower() == "reset":
    data = dict()
    logging.info("Storing Wis Key="+wiskey)
    memcache.set(wiskey, data, 3600)
    msg = "Data reset"
elif guess < 1 :
    msg = "Please enter a valid, numeric guess"
elif len(name) < 1 :
    msg = "No Name Found"
elif name in data :
    msg = "You already have answered this"
elif len(data) > 1000 :
    msg = "Game only supports 1000 players."
else:
    data[name] = guess
    memcache.set(wiskey, data, 3600)
    logging.info("Storing Wis Key="+wiskey)
    data = self.getmodel(wiskey)
    if data.get(name, None) == guess :
        msg = "Thank you for your guess"
    else:
        msg = "Unable to store your guess please re-submit"
return msg
```

80 lines
of
Python



80 lines of Python

```
def getview(self, info):
    whiskey = "WisCrowd-"+str(self.context.course.key())
    data = self.getmodel(whiskey)
    rendervars = {'context': self.context,
                  'msg' : info}
    if self.context.isInstructor() and len(data) > 0 :
        text = ""
        total = 0
        for (key, val) in data.items():
            text = text + key + "," + str(val) + "\n"
            total = total + val
        count = len(data)
        ave = 0
        if count > 0 : ave = total / count
        rendervars["ave"] = ave
        rendervars["count"] = count
        rendervars["data"] = text
    return self.doRender('index.htm', rendervars)

def getmodel(self, whiskey):
    data = memcache.get(whiskey)
    if data == None or not isinstance(data, dict):
        data = dict()
    return data
```



```
<p>Hello: {{ context.getUserName }}
{% if context.isInstructor %}
(Instructor)
{% endif %}
from {{ context.getCourseName }}</p>
{% if msg %}
<p>{{ msg }}</p>
{% endif %}
<form method="post" action="{{ context.getPostPath }}">
{{ context.getFormFields }}
<p>Enter Guess: <input type="text" name="guess"/></p>
<p>Enter Name (opt): <input type="text" name="name"/></p>
<p><input type="submit"></p>
</form>
{% if ave %}
<p>Average: {{ ave }} Count: {{count}} </p>
{% endif %}
{% if data %}
<pre>
{{ data }}
</pre>
{% endif %}
```

25 lines
of HTML





CloudCollab Goals



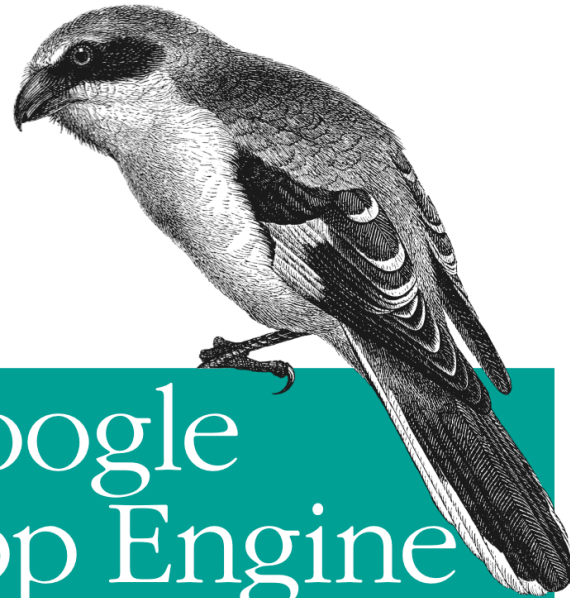
- Easy to use tool building and hosting environment
- Support **IMS Learning Tools Interoperability** and other IMS specs
- Written in Python, Free, Open Source
- Hostable on Google for **Free**
- **Teachers writing tools - students writing tools (Thousands)**

www.cloudcollab.org



High School
College
Freshman
Level

Building Web Applications



Using

Google App Engine

O'REILLY®

Charles Severance



Programming
HTML
CSS
Database
JavaScript



Google App Engine

Google App Engine Intro

Campfire One: Introducing Google App Engine (pt. 1)

- Why App Engine?
 - Make the web better
 - More developers
- It is nice to outsource production issues



<http://www.youtube.com/watch?v=tcbpTQXNwac>

2:50

Simple Application Video

- Brett Slatkin builds a Google App Engine application in 10 minutes
 - Basic structure - GET / POST
 - Form Input
 - Templating
 - Database



<http://www.youtube.com/watch?v=tcbpTQXNwac>

Google App Engine

- When you write a Google Application Engine Application - you are running in the Google Cloud
- Just like you were a Google Developer
- You don't know where you are running or if one copy of a thousand copies of you are running
- Google hosts small applications for *free* - larger applications pay by usage

Resource	Free Default Quota		Billing Enabled Quota	
	Daily Limit	Maximum Rate	Daily Limit	Maximum Rate
Requests	1,300,000 requests	7,400 requests/minute	43,000,000 requests	30,000 requests/minute
Outgoing Bandwidth (billable , includes HTTPS)	1 gigabyte	56 megabytes/minute	1 gigabyte free; 1,046 gigabytes maximum	740 megabytes/minute
Incoming Bandwidth (billable , includes HTTPS)	1 gigabyte	56 megabytes/minute	1 gigabyte free; 1,046 gigabytes maximum	740 megabytes/minute
CPU Time (billable)	6.5 CPU-hours	15 CPU-minute/minute	6.5 CPU-hours free; 1,729 CPU-hours maximum	72 CPU-minute/minute

<http://code.google.com/appengine/docs/quotas.html>

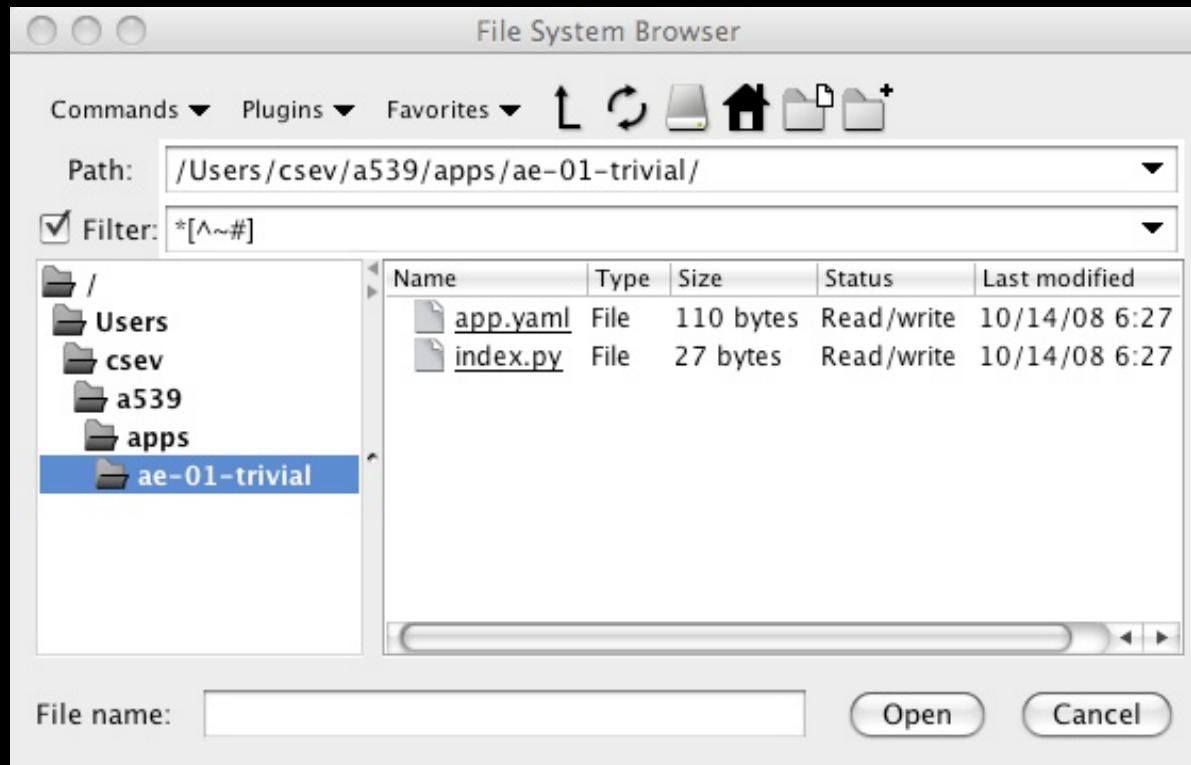
Download the Google App Engine SDK

Before downloading, please read the [Terms](#) that govern your use of the App Engine SDK.

Please note: The App Engine SDK is under **active development**, please keep this in mind as you explore its capabilities. See the [SDK Release Notes](#) for the information on the most recent changes to the App Engine SDK. If you discover any issues, please feel free to notify us via our [Issue Tracker](#).

Platform	Version	Package	Size	SHA1 Checksum
Windows	1.1.9 - 02/09/09	GoogleAppEngine_1.1.9.msi	2.7 MB	c0a09f23950de606a4c4933687335582c18bd3cd
Mac OS X	1.1.9 - 02/09/09	GoogleAppEngineLauncher-1.1.9.dmg	3.8 MB	d8ca6afa091fea1e48e2132454a71bf7ecbfd627
Linux/Other Platforms	1.1.9 - 02/09/09	google_appengine_1.1.9.zip	2.8 MB	aa11e2e6940071cf61c3092b2365605a01d739e7

<http://code.google.com/appengine/downloads.html>



app.yaml - Tells Google about the application
index.py - the code for our application

jEdit - app.yaml

File Edit Search Markers Folding View Utilities Macros Plugins Help

◇ app.yaml (/Users/csev/a539/apps/ae-01-trivial/)

```
application: ae-01-trivial.
version: 1.
runtime: python.
api_version: 1.
.
handlers:
- url: /*.
  script: index.py.
```

1,27 All (text,none,MacRoman)- --- U 4/5Mb

jEdit - index.py

File Edit Search Markers Folding View Utilities Macros Plugins Help

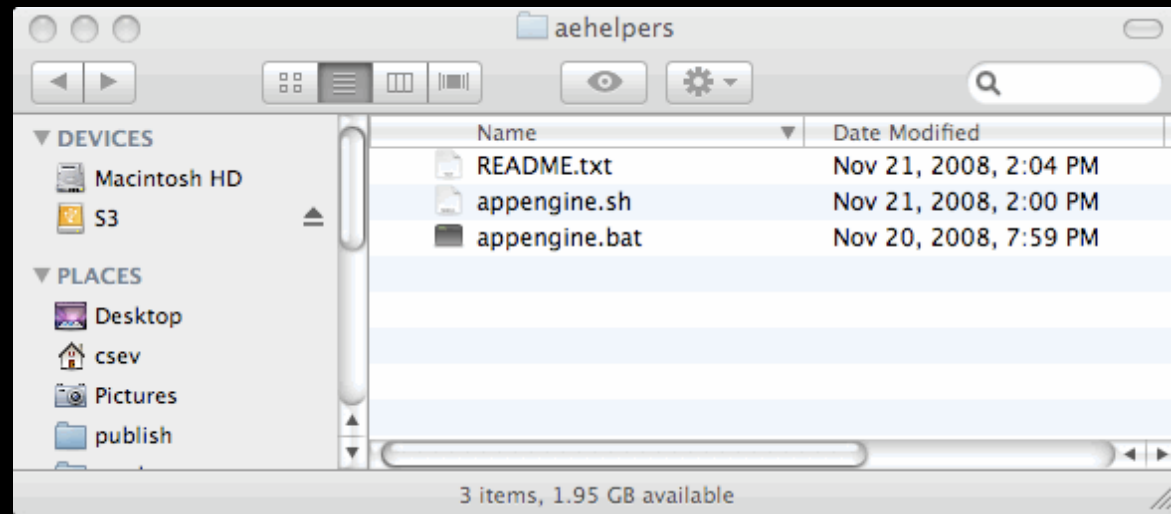
◇ index.py (/Users/csev/a539/apps/ae-01-trivial/)

```
print "Hello There Chuck".
```

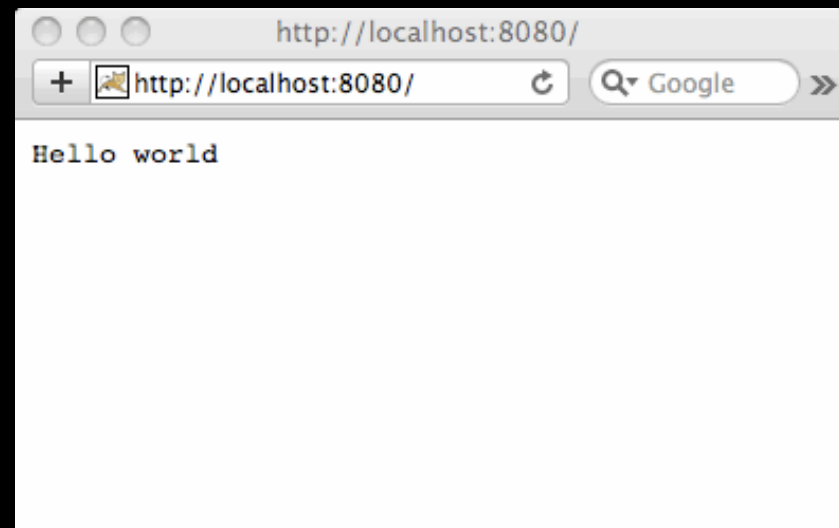
2,1 All Input/output complete (python,none,MacRoman)- --- U 4/5Mb

Helper Scripts

- <http://www.appenginelearn.com/static/aehelpers.zip>



```
charles-severances-macbook-pro:apps csev$ ls -l
total 8
-rw-r--r--@ 1 csev  staff  742 Nov 21  2008 appengine.sh
drwxr-xr-x  4 csev  staff  136 Jul  7 00:06 trivial
charles-severances-macbook-pro:apps csev$ sh appengine.sh trivial/
Checking trivial/
INFO      2009-07-07 04:07:03,916 appengine_rpc.py:157] Server: appengine.google.com
INFO      2009-07-07 04:07:03,924 appcfg.py:322] Checking for updates to the SDK.
INFO      2009-07-07 04:07:04,041 appcfg.py:336] The SDK is up to date.
INFO      2009-07-07 04:07:04,099 dev_appserver_main.py:465] Running application trivial on
port 8080: http://localhost:8080
█
```



Writing a CloudCollab Portlet

www.cloudcollab.org





CloudCollab Goals



- Easy to use tool building and hosting environment
- Support **IMS Learning Tools Interoperability** and other IMS specs
- Written in Python, Free, Open Source
- Hostable on Google for **Free**
- **Teachers writing tools - students writing tools (Thousands)**

www.cloudcollab.org

A CloudCollab “Portlet”

- Inspired by JSR-168 and JSR-286 “Java Portlet Specification”
- The tool produces a “fragment” to be placed on a screen using a portal
- The enclosing portal decides how to show the context
- There are constraints on the HTML produced by the portlet so the portal can repurpose the Portlet’s fragments

CloudCollab Markup

- Each portlet is also has a “servlet-style” URL and can be placed into an iframe
- A portlet can be told to constrain itself within a named div (this is how CloudCollab’s own internal portal will work)
- A portlet can be told to return Facebook Markup Language instead of HTML
- (Future) a portlet can generate Web Services for Remote Portlets (WSRP)

CloudCollab Authentication

- CloudCollab can establish user identity, organizational identity, and course context in a number of ways
 - IMS Simple LTI
 - IMS Basic LTI
 - Google Accounts
 - Facebook Accounts (A CloudCollab tool is also a Facebook tool)
- CloudCollab is inherently multi-tenancy (i.e. multiple organizations)

CloudCollab Framework (Tsugi)

- Portlets are tolerant of cookies turned off
- Portlets are tolerant of JavaScript turned off
- (Future) Accessibility will be accomplished by using Fluid approaches of generating very basic HTML and using JavaScript to improve the HTML.

<< back to portal [CloudCollab](#) [Logout \(drchuck\)](#)

Hello: drchuck (Instructor) from Test via google

Enter Guess:

Enter Name (opt):

CloudCollab - Collaboration and Learning Tools

http://wiscrowd.appspot.com/wiscrowd/12345/ Google

Hello: drchuck (Instructor) from Test via google

Enter Guess:

Enter Name (opt):

facebook Home Profile Friends Inbox 1 Charles Severance

Hello: Charles Severance from Test via facebook

Please enter a valid, numeric guess

Enter Guess:

Enter Name (opt):

Applications Bookmark wiscrowd Chat (8)



[Logout](#)

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[Administration Workspace](#)

[Citations Admin](#)

[mercury site](#)

[Portfolio Admin](#)

[Test](#)

[Home](#)

[Site Info](#)

BasicLTI

[Help](#)

[IMS Basic Learning Tool Interoperability](#)

Hello: Sakai Administrator (Instructor) from Test via basicliti

Enter Guess:

Enter Name (opt):

[Guess](#)

[Reset Game Data](#)

ctools.umich.edu

[Logout](#)

[My Workspace](#)

[SI 301 W09](#)

[SI 791 W09 csev](#)

[SI 539 W08](#)

[AMT P9 2009](#)

[SI502](#)

[SI502Staff](#)

[SI 502 W09 Paul](#)

[- more sites -](#)

[Simple Learning Tool Interoperability](#)

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[Assignments](#)

[Test Center](#)

[SAMS Scores](#)

[Email Archive](#)

[Calendar](#)

Hello: Charles Severance (Instructor) from Test via simpleliti

Enter Guess:

Enter Name (opt):

[Guess](#)

[Reset Game Data](#)

CloudCollab - Collaboration and Learning Tools

http://wiscrowd.appspot.com/wiscrowd/12345/ Google

LocalSakaiName : Test : BasicLTI wiscrowd on Facebook CloudCollab - Collaboration and ...

Hello: drchuck (Instructor) from Test via google

Enter Guess:

Enter Name (opt):

Exercise

<http://drchuck.dyndns.org:8080/portal/>

Make a new account with full info

Create a Project Site

Add the BasicLTI Proxy Tool to your site

Configure the tool to point to

<http://wiscrowd.appspot.com/wiscrowd/12345/>

secret is secret

Download CloudCollab

```
svn co http://cloudcollab.googlecode.com/svn/tsugi/trunk wiscrowd
```

Check this out as a directory in your “apps” directory. It is a complete App Engine application.

Once downloaded, start up the wiscrowd (depending on OS)


```
dev_appserver.py wiscrowd  
sh appengine.sh wiscrowd  
appengine wiscrowd
```

CloudCollab - Collaboration and Learning Tools

http://localhost:8080/ Google

My Dashboard [CloudCollab](#) [Login](#)

Welcome to the demo of the CloudCollab framework for building applications using IMS Learning Tools Interoperability (Simple LTI and Basic LTI).



This looks like an LMS - but really it is intended to be a collection of tools launched from another LMS using the IMS LTI protocol.

If you want to simulate a Simple LTI Launch click [here](#).

The IMS Learning Tools Interoperability and Basic LTI are being developed by the www.imsglobal.org. If you are interested in standards and interoperability for teaching and learning technology you should become involved in IMS.

Questions and comments to [Dr. Chuck](#)

[Simple Learning Tools Interoperability](#)
[IMS Learning Tools Interoperability v2.0 Working Group](#)
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powered by Google App Engine

2 Developers

Exercise

- Login in to CloudCollab on <http://localhost:8080>
- Navigate to Wisdom of Crowds tool in the CloudCollab portal and also look at the fragment
- Go back to <http://drchuck.dyndns.org:8080/portal>
- Configure your BasicLTI Tool in Sakai to point to
 - <http://localhost:8080/wiscrowd/12345/>
- You should see the Wisdom of Crowds tool inside of Sakai

A New Portlet (Handout)

- Go into `wiscrowd/mod`
- Make new folder called “trivial”
- Create `__init__.py` and `index.py` per handout instructions
- Exit and restart your wiscrowd server to have it rescan the modules directory
- Verify that the Trivial Application appears

```
from core import tool
from core import learningportlet
```

```
def register():
    return tool.ToolRegistration(TrivialHandler,
                                'Trivial Tool',
                                'This tool is very very trivial')
```

```
class TrivialHandler(learningportlet.LearningPortlet):
```

```
    def doaction(self):
        return None
```

```
    def getview(self, info):
        return 'Hello from getview()'
```

Action and View

- Servlets think in terms of “GET” and “POST”
- Portlets think in terms of “handle an action” and “produce a view”
- You are only supposed to change state in the “handle an action” phase
- GET and POST map to ACTION and VIEW differently depending on who is requesting the markup (browsers, Ajax, Facebook, etc)

```
def handlepost(self):
    info = self.doaction()
    if (not isinstance(self.div, str) ) and self.redirectafterpost is True:
        self.session["info"] = info
        redirecturl = self.getGetUrl(action="view")
        self.redirect(redirecturl)
        return None
    else:
        output = self.getview(info)
        self.session.delete_item("info")
        return output
```

```
def handleget(self):
    if self.action == "view":
        info = self.session.get("info", None)
    else:
        info = self.doaction()
        self.action = "view"
    self.session.delete_item("info")
    output = self.getview(info)
    return output
```

Scenario Sequences

Simple GET: `getview()`

GET with Action: `doaction() getview()`

Normal POST: `doaction() redirect getview()`

AJAX POST: `doaction() getview()`

FaceBook POST with no action: `getview()`

FaceBook POST with action: `doaction() getview()`

It is a bit complex when all the choices are contemplated.

HTML Helpers

- In order to generate the proper HTML for AJAX / nonAJAX, Facebook, etc destinations of the markup, we have some helpers which generate HTML for us
- The helpers are an extension to the templating language

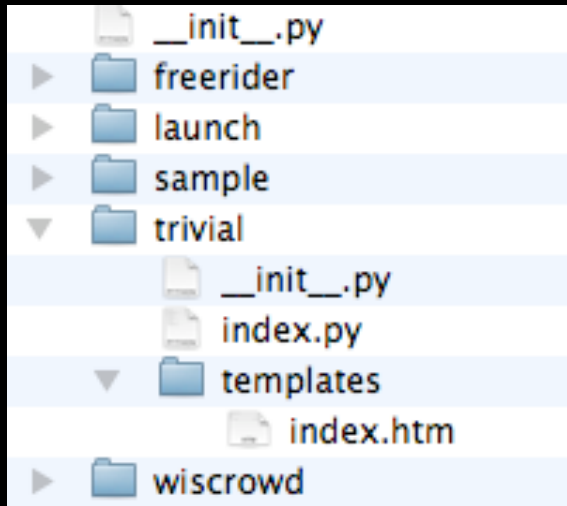
Exercise

- Go through the “Add a Form to the Application” steps

```
def doaction(self):
    logging.info("doaction action=%s" % self.action)
    guess = self.request.get('guess')
    try:
        iguess = int(guess)
    except:
        return 'Please enter a valid guess'

    if iguess == 42:
        return 'Congratulations!'
    elif iguess < 42:
        return 'Your guess %s is too low' % iguess
    else:
        return 'Your guess %s is too high' % iguess
```

```
def getview(self, info):  
    rendervars = dict()  
  
    if isinstance(info, str):  
        rendervars['msg'] = info  
  
    return self.doRender('index.htm', rendervars)
```



```
<p>Welcome to the Guessing Game</p>
{% if msg %}
  <p>{{msg}}</p>
{% endif %}
{! form_tag !}
<input type="text" name="guess" size="40">
{! form_submit('Guess') !}
</form>
```

Exercise

- Go through the “Using a Session” steps

```
def doaction(self):
    guess = self.request.get('guess')
    try:
        iguess = int(guess)
    except:
        return ' Please enter a valid guess'

    self.session['guesses']=self.session.get('guesses',0)+1

    if iguess == 42:
        return 'Congratulations!'
    elif iguess < 42:
        return 'Your guess %s is too low' % iguess
    else:
        return 'Your guess %s is too high' % iguess
```

```
def getview(self, info):
    rendervars = dict()

    if not info is None:
        rendervars['msg'] = info

    rendervars['guesses'] = self.session.get('guesses', 0)

    return self.doRender('index.htm', rendervars)
```

```
<p>Welcome to the Guessing Game</p>
{% if msg %}
<p>{{msg}}</p>
{% endif %}
<p>Guess Count: {{ guesses }}</p>
{! form_tag !}
<input type="text" name="guess" size="40">
{! form_submit('Guess') !}
</form>
```

Exercise

- Go through the “Reset button” steps

```
def doaction(self):
    logging.info("doaction action=%s" % self.action)
    if self.action == 'reset':
        self.session.delete_item('guesses')
        return "Guess count reset!"

    guess = self.request.get('guess')

    try:
        iguess = int(guess)
    except:
        return ' Please enter a valid guess'

    ....
```

```
<p>Welcome to the Guessing Game</p>
{% if msg %}
  <p>{{msg}}</p>
{% endif %}
<p>Guess Count: {{ guesses }}</p>
{! form_tag !}
<input type="text" name="guess" size="40">
{! form_submit('Guess') !}
{! form_button('Reset Game Data', action='reset') !}
</form>
```

HTML Helpers

```
form_tag(attributes={}, params={}, action=False, resource=False,  
controller=False, context_id=False)
```

```
form_submit(text, attributes={})
```

```
form_button(text, params={}, attributes={}, action=False, resource=False,  
controller=False, context_id=False)
```

```
link_to(text, params={}, attributes={}, action=False, resource=False,  
controller=False, context_id=False)
```

```
ajax_url(params={}, action=False, resource=False, controller=False,  
context_id=False)
```

HTML Helper Examples

```
{! link_to('Click Me', attributes={'class' : 'selected' },  
          action='act-anchor' ) !}
```

```
{! form_button('Cancel', attributes={'class' : 'selected' },  
              action='act-cancel' ) !}
```

Next Steps

- Read the “Using Google App Engine” book
- Learn more about Python, Templates, Datastore, etc...
- Send URLs and secrets to your friends :)
- Give me feedback on these ideas

Introducing IMS Basic Learning Tools Interoperability

In PowerPoint...

IMS Basic Learning Tools Interoperability Support in Sakai

SimpleLTI Support

- SimpleLTI Portlet available
 - <https://source.sakaiproject.org/contrib/sakai-portlets/trunk/>
 - Running in production at UM since Fall 2008
 - Can be a tool in a worksite or a virtual tool
- Supported in Melete 2.6.1 - Authoring / Import / Export

Simple Learning Tool Interoperability



Hello: Charles Severance (Instructor) from SI 301 W09 via simpletti

Enter Guess:

Enter Name (opt):

- Home
- Resources
- Podcasts
- Assignments
- Test Center
- SAMS Scores
- Email Archive
- Calendar
- Software

Simple Learning Tool Interoperability



[Exit Edit Mode](#) | [Clear Session Settings](#) | [Clear Stored Preferences](#)

Required Information

Remote Tool Url:

Remote Tool Password: (Must re-enter every time)

Display Information

Set Page Title: (Button text)

Set Tool Title: (Above the tool)




The important thing is not to stop questioning.
-- Einstein

[Logout](#)

My Workspace | DEMO - PLAYGROUND | **DEMO CSEV 101 DEV** | Users Group

MODULES

[View](#) [Author](#) [Manage](#) [Preferences](#)

 Viewing student side...

[Prev](#) | [Table Of Contents](#) |

[Testing Tools Interoperability](#) » Wisdom of Crowds

Testing Tools Interoperability Wisdom of Crowds

Hello: csev (Instructor) from DEMO CSEV 101 DEV

Enter Guess:

Enter Name (opt):

- Home
- Schedule
- Announcements
- Modules**
- Assignments
- Tests & Quizzes
- Discussion and Private Messages
- Chat Room
- Site Info

users present:

Chuck Severance

SimpleLTI Virtual Tool

- Allows the system administrators to register fake tools that are really Simple LTI Tools with pre-set URLs and secrets
- These tools show up in Site Setup and can be added to a site by the teacher - the teachers often never even know these tools use SimpleLTI

[Site Info](#)[Score Report](#)[Help](#)

Users present:

David Pang

[Score Report](#)

? ?

[Omnibus I](#)[Omnibus II](#)[Exam](#)**Omnibus II Score Summary**

(Note : [My %] = [My Total] / [Set Total] * [Set %])

Set	Date	Short Name	Description	My Total	Set Total	Set %	My %
1	07/01/2008	celSph	Celestial Sphere	9.5	10	10	9.50
2	07/08/2008	spect	Spectroscopy	8	10	10	8.00
3	07/15/2008	HR	HR Diagram	7	10	10	7.00
4	07/22/2008	Var	Cepheid Variables	9	10	10	9.00
5	07/29/2008	Age	Age of the Universe	10	10	10	10.00

Omnibus II Score Achievement : 43.5 out of 50 (87.00 %)

Any questions about the Omnibus II Score scores? [Request a score correction.](#)

BasicLTI in Sakai

- BasicLTI Portlet is complete which supports BasicLTI virtual tools
 - <https://source.sakaiproject.org/contrib/csev/trunk/basicliti/>
 - LTI Placements go through /access
- Coming: Support in Melete will be part of a bundle that includes Common Cartridge Import (hopefully 4Q2009)
- Contemplating - Adding “Add New Resoure” in Resources Tool

Project Site Tools

Choose tools to include on your site...

- | | | |
|-------------------------------------|---------------|---|
| <input type="checkbox"/> | Home | For viewing recent announcements, discussion, and chat items. |
| <input type="checkbox"/> | Announcements | For posting current, time-critical information. |
| <input type="checkbox"/> | Assignments | For posting, submitting and grading assignment(s) online. |
| <input checked="" type="checkbox"/> | Basic LTI | IMS Basic Learning Tools Interoperability. |
| <input type="checkbox"/> | Blogger | A blogger |
| <input type="checkbox"/> | Chat Room | For real-time conversations in written form. |
| <input type="checkbox"/> | Drop Box | For private file sharing between instructor and student. |
| <input type="checkbox"/> | Email Archive | For viewing email sent to the site. |
| <input type="checkbox"/> | Evaluations | View outstanding evaluations from student's ePortfolio matrices and wizards |

IMS Basic Learning Tool Interoperability

[Exit Edit Mode](#) | [Clear Session Settings](#) | [Clear Stored Preferences](#)

Required Information

URL and Password

Remote Tool Url:

Remote Tool Password: (Must re-enter every time)

Display Information

Set Page Title: (Button text)


Set Tool Title: (Above the tool)

Optional Launch Information

iFrame Height: ([What's this?](#))

Debug Launch: ([What's this?](#))

<< back to portal [CloudCollab](#) [Logout \(drchuck\)](#)

Hello: drchuck (Instructor) from SI101 

Enter Guess:

Enter Name (opt):

www.tsugiproject.org

www.appenginelearn.com

www.pythonlearn.com



Thank you

www.dr-chuck.com