Design and Engineering of Intelligent
Information Systems

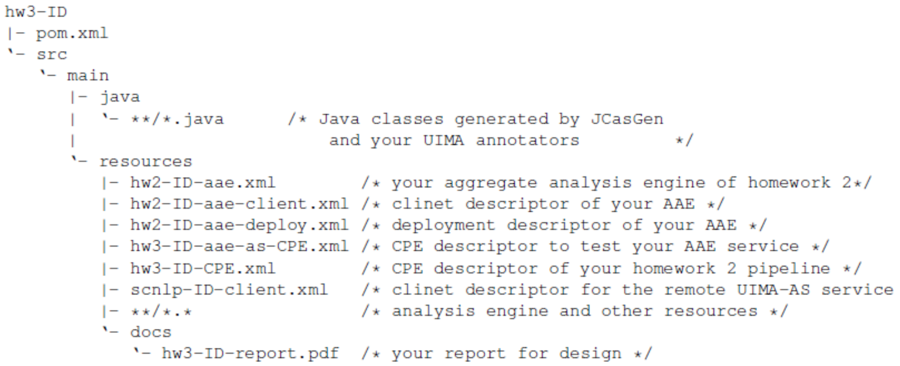
*Execution Architecture with CPE and Deployment
Architecture with UIMA-AS*

hw3-137175

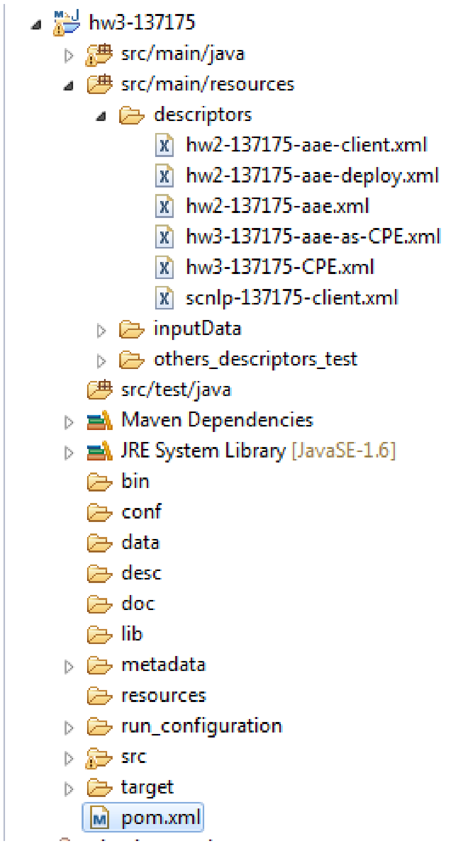
Tania Patiño

28-03-2014

Organization for this project is the next one:



```
hw3-ID
|- pom.xml
`- src
   `- main
      |- java
      |  `- **/*.java      /* Java classes generated by JCasGen
      |                       and your UIMA annotators         */
      `- resources
         |- hw2-ID-aae.xml        /* your aggregate analysis engine of homework 2*/
         |- hw2-ID-aae-client.xml /* clinet descriptor of your AAE */
         |- hw2-ID-aae-deploy.xml /* deployment descriptor of your AAE */
         |- hw3-ID-aae-as-CPE.xml /* CPE descriptor to test your AAE service */
         |- hw3-ID-CPE.xml        /* CPE descriptor of your homework 2 pipeline */
         |- scnlp-ID-client.xml   /* clinet descriptor for the remote UIMA-AS service
         |- **/*.*                /* analysis engine and other resources */
         `- docs
            `- hw3-ID-report.pdf  /* your report for design */
```



```
◢ hw3-137175
   ▷ src/main/java
   ◢ src/main/resources
      ◢ descriptors
           hw2-137175-aae-client.xml
           hw2-137175-aae-deploy.xml
           hw2-137175-aae.xml
           hw3-137175-aae-as-CPE.xml
           hw3-137175-CPE.xml
           scnlp-137175-client.xml
      ▷ inputData
      ▷ others_descriptors_test
     src/test/java
   ▷ Maven Dependencies
   ▷ JRE System Library [JavaSE-1.6]
     bin
     conf
     data
     desc
     doc
     lib
   ▷ metadata
     resources
   ▷ run_configuration
   ▷ src
   ▷ target
     pom.xml
```

On the folder others_descriptiors_test, there are some files that were tested when the experimentation of the environment UIMA-Eclipse and UIMA-AS was done.

In this task, was created a Collection Processing Engine (CPE) and also the task was to understand how to use it. Requirements were, run the pipeline with a CPE instead of the UIMA Document Analyzer.

Task 1.1 Learning CPE

Resources CPE

Basic concepts and usage about CPE from *Chapter 2. Collection Processing Engine Developer's Guide* (http://uima.apache.org/d/uimaj-2.4.0/tutorials_and_users_guides.html#ugr.tug.cpe).

Manual for CPE GUI (http://uima.apache.org/d/uimaj-2.4.0/tools.html#ugr.tools.cpe).

The acronym CPE, corresponds to a *Collection Processing Engine,* which one ilustrates the management of the data flow that goes between different types of components that make up a CPE. Each component form part of this data flow. There are many components, for example:

1.**CAS Initializer:** is a component to populate a CAS from a document. This one is focus on the population of a document, how a document could be filled by data and what kind of data.

2.**CAS Consumer:** there could be more than one component like this one, the main idea about this, is to consume the enriched CAS that was generated by the sequence of Analysis Engines. Types of CAS Consumers are search engine like Google, index (this one is related to how to index the data in a database or what?) or a database like Oracle.

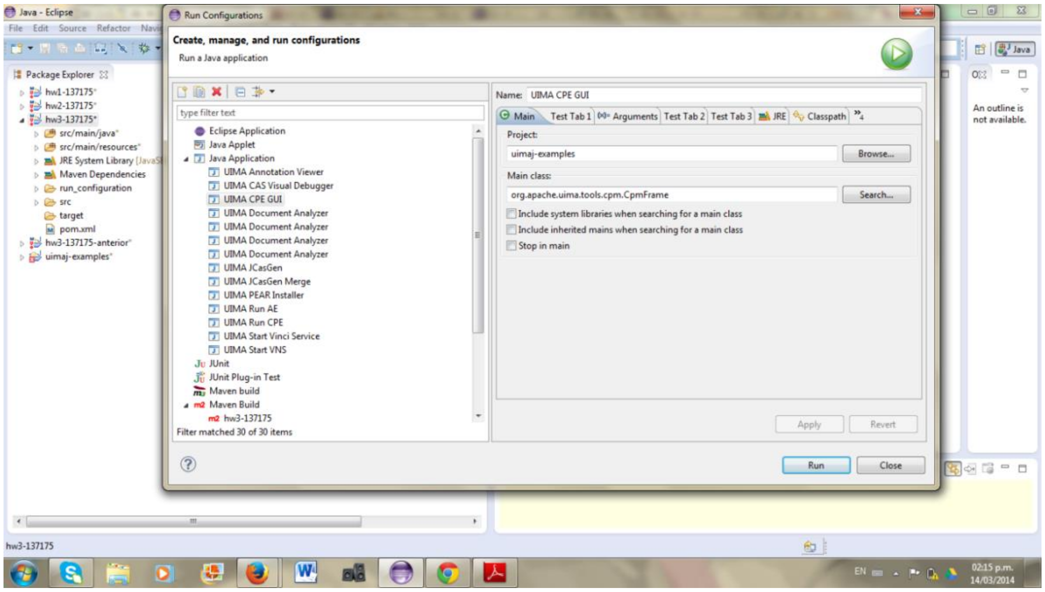
3.**Collection Reader:** interfaces to a collection of documents that should be analyzed. Maybe this is related to XML files and the analysis about every structure of the data like tags <building></building>, labels and keywords, etc.

4.**Analysis Engine:** this one takes a CAS analyses takes its contents and produce enriched CAS.

Secondly, following the next link related to how to make a CPE step by step, and also there is a explanation about exploration and applications of this tool: http://uima.apache.org/d/uimaj-2.4.0/tools.html#ugr.tools.cde

In the next description, there is an explanation related to the CPE Configuration steps and CAS viewer.

1. Open Eclipse-IDE then go to Menu option ->
2. Run -> Run Configurations -> Select UIMA CPE GUI, then click on Run



Run Configurations

Create, manage, and run configurations

Run a Java application

Name: UIMA CPE GUI

Project: uimaj-examples

Main class: org.apache.uima.tools.cpm.CpmFrame

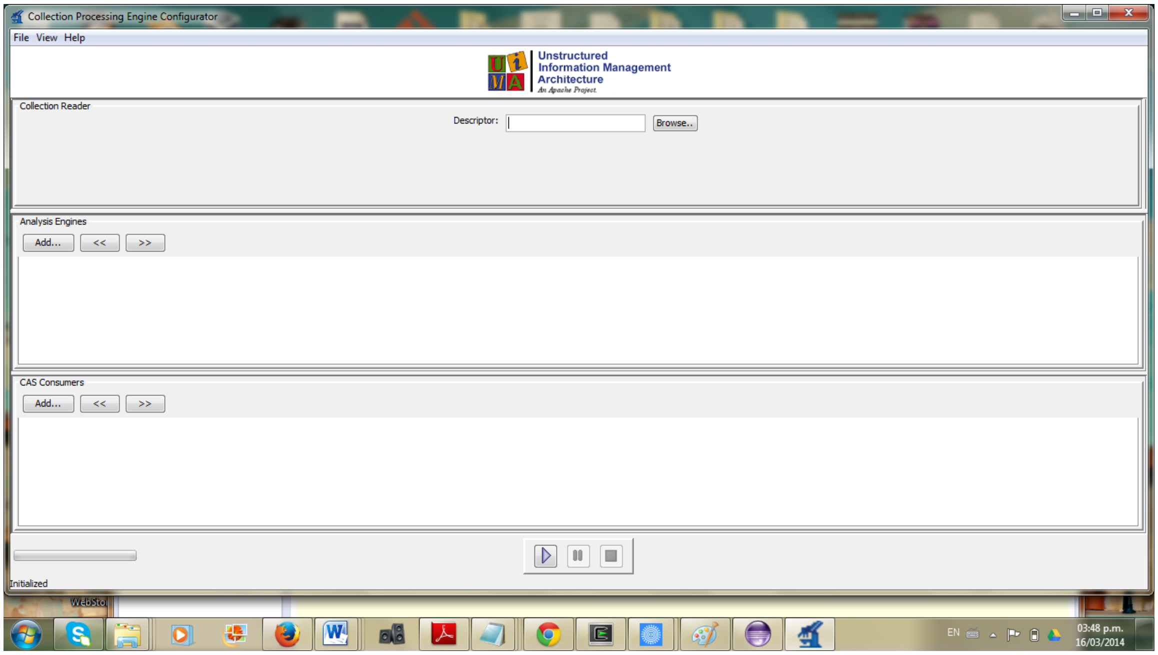
□ Include system libraries when searching for a main class

□ Include inherited mains when searching for a main class

□ Stop in main

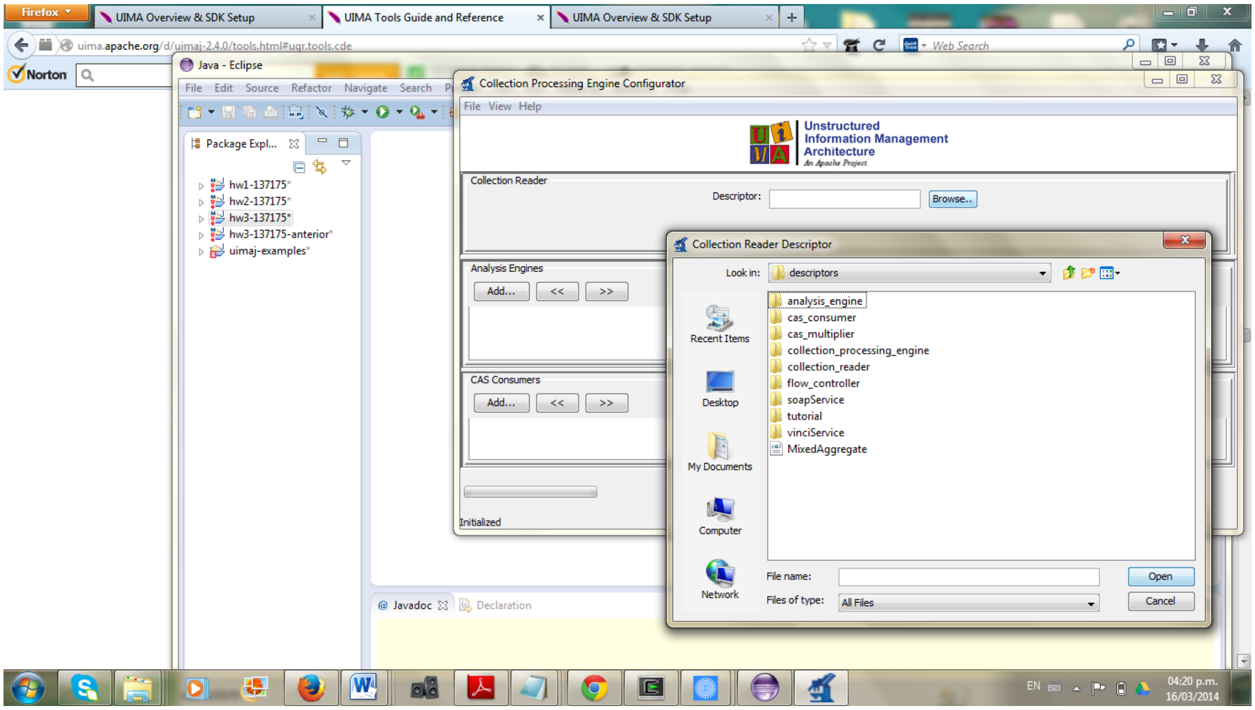
Filter matched 30 of 30 items

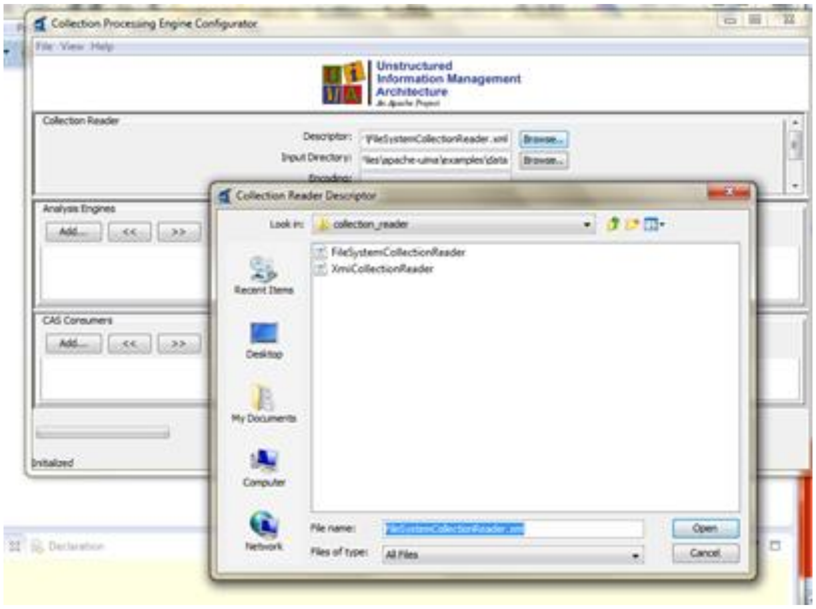
Then the next window related to Collection Processing Engine Configurator is open, where a descriptor have to be select the descriptor and more options are activated.



Then making some experiments with the files that come by default on the descriptors folder. Finally make a selection following this path:

Selecting Collection Reader Descriptor-> collection_reader->FileSystemCollectionReader.xml





Descriptor: \FileSystemCollectionReader.xml
Input Directory: \les\apache-uima\examples\data
Encoding:

Look in: collection_reader

FileSystemCollectionReader
XmiCollectionReader

File name: FileSystemCollectionReader.xml
Files of type: All Files

The collection reader needs to be general enough to establish a connection to the file source and open a stream to read the content. Creating a org.apache.uima.tools.components.FileSystemCollectionReader directly, and only need to write a Collection Reader descriptor.

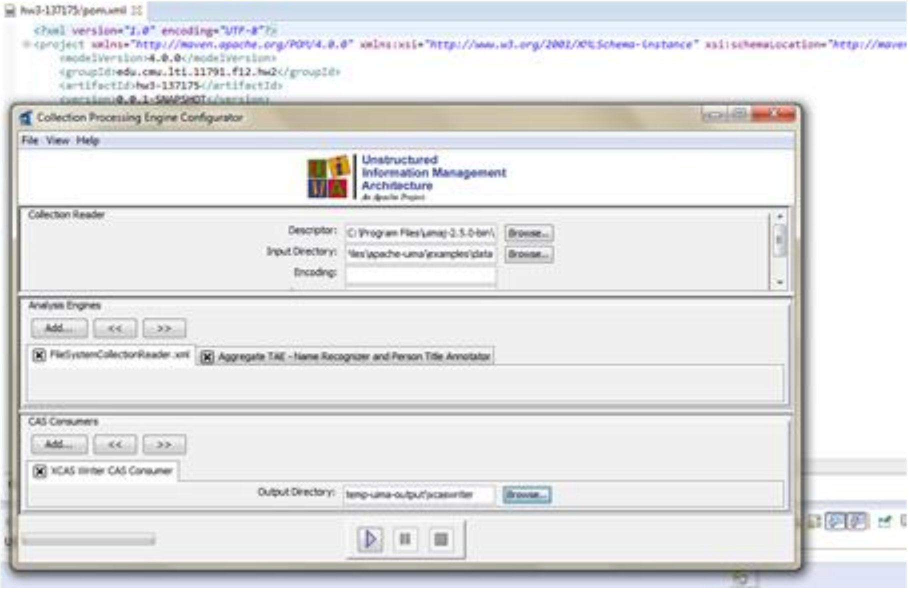
Descriptor:C:\ProgramFiles\uimaj-2.5.0-bin\apache uima\examples\descriptors\collection_reader\FileSystemCollectionReader.xml

Input Directory: C:\Program Files\apache-uima\examples\data

Analysis Engines:

Aggregate TAE- Name Recognizer and Person Title Annotator

Cas Consumer: XCAS Writer Cas Consumer



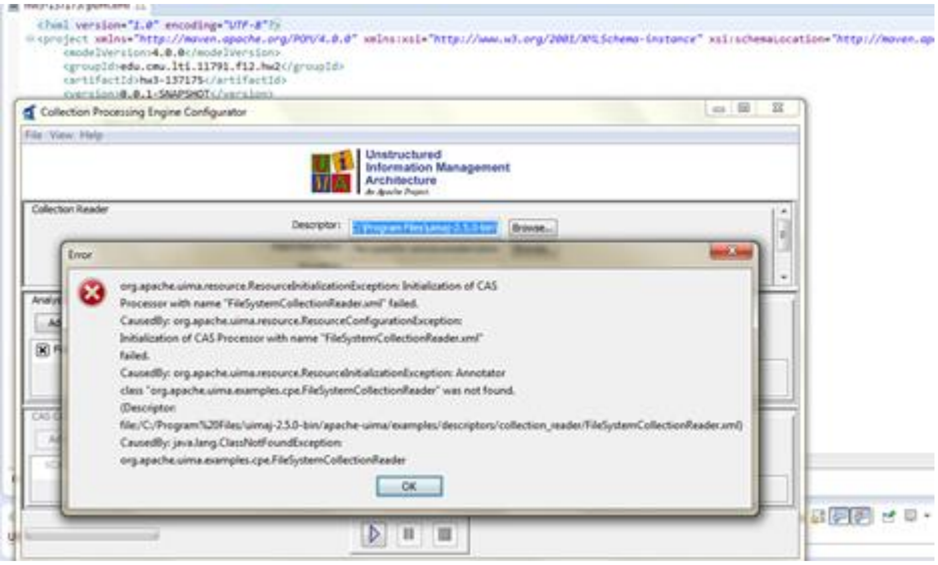
```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven
    <modelVersion>4.0.0</modelVersion>
    <groupId>edu.cmu.lti.11791.f12.hw2</groupId>
    <artifactId>hw3-137175</artifactId>
    <version>0.0.1-SNAPSHOT</version>
```

Descriptor: C:\Program Files\uimaj-2.5.0-bin\
Input Directory: \les\apache-uima\examples\data
Encoding:

☒ FileSystemCollectionReader.xml
☒ Aggregate TAE - Name Recognizer and Person Title Annotator

☒ XCAS Writer CAS Consumer
Output Directory: temp-uima-output\xcaswriter

Following the first steps, appears many issues, some were created because the wrong configuration paths or the wrong calling of a file for a descriptor option.

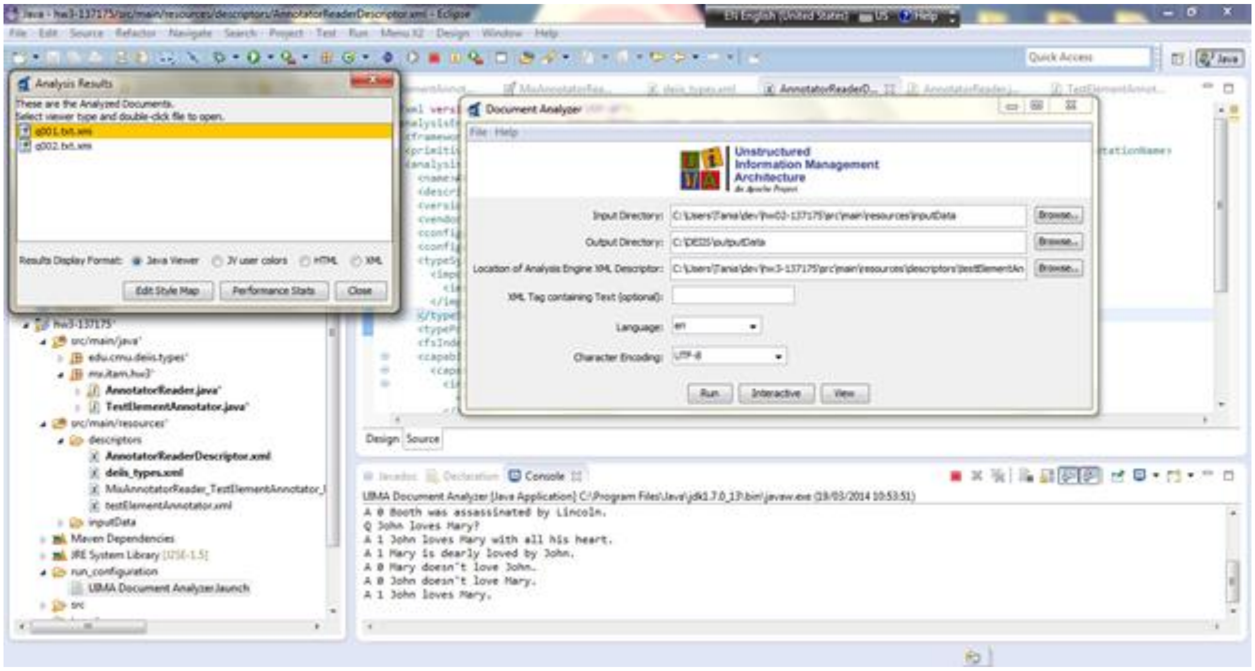


```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.ap
    <modelVersion>4.0.0</modelVersion>
    <groupId>edu.cmu.lti.11791.f12.hw2</groupId>
    <artifactId>hw3-137175</artifactId>
    <version>0.0.1-SNAPSHOT</version>
```

Descriptor: C:\Program Files\uimaj-2.5.0-bin\

```
org.apache.uima.resource.ResourceInitializationException: Initialization of CAS
Processor with name "FileSystemCollectionReader.xml" failed.
CausedBy: org.apache.uima.resource.ResourceConfigurationException:
Initialization of CAS Processor with name "FileSystemCollectionReader.xml"
failed.
CausedBy: org.apache.uima.resource.ResourceInitializationException: Annotator
class "org.apache.uima.examples.cpe.FileSystemCollectionReader" was not found.
(Descriptor:
file:/C:/Program%20Files/uimaj-2.5.0-bin/apache-uima/examples/descriptors/collection_reader/FileSystemCollectionReader.xml)
CausedBy: java.lang.ClassNotFoundException:
org.apache.uima.examples.cpe.FileSystemCollectionReader
```

Document Analyzer with UIMA making test and experiments that ran all right:



These are the Analyzed Documents.
Select viewer type and double-click file to open.

- q001.txt.xmi
- q002.txt.xmi

Results Display Format: ● Java Viewer ○ JV user colors ○ HTML ○ XML

Input Directory: C:\Users\Tania\dev\hw02-137175\src\main\resources\inputData

Output Directory: C:\DEIIS\outputData

Location of Analysis Engine XML Descriptor: C:\Users\Tania\dev\hw3-137175\src\main\resources\descriptors\testElementAn

XML Tag containing Text (optional):

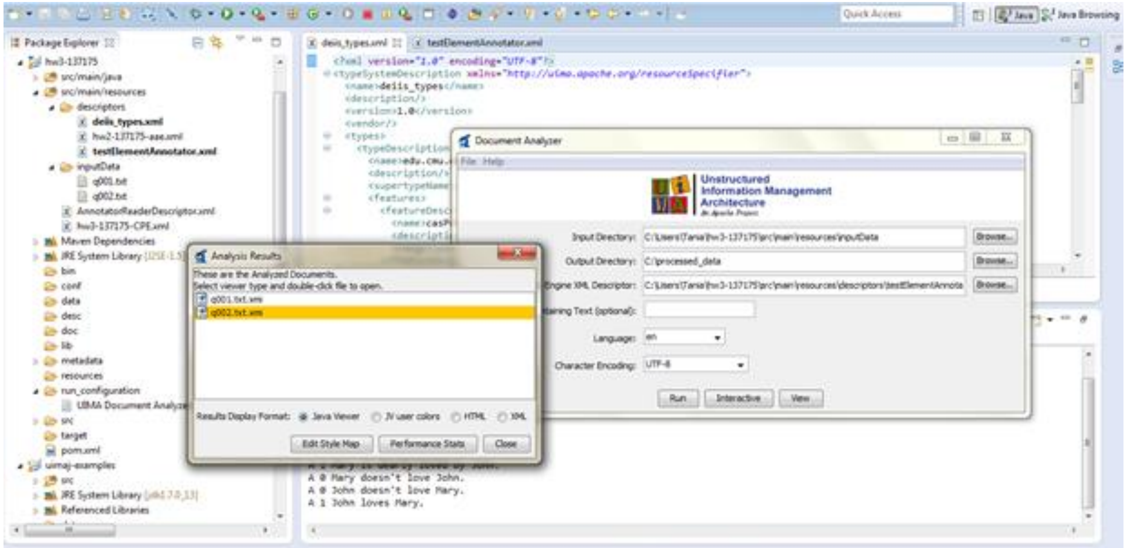
Language: en

Character Encoding: UTF-8

UIMA Document Analyzer [Java Application] C:\Program Files\Java\jdk1.7.0_13\bin\javaw.exe (18/03/2014 10:53:51)

```
A 0 Booth was assassinated by Lincoln.
Q John loves Mary?
A 1 John loves Mary with all his heart.
A 1 Mary is dearly loved by John.
A 0 Mary doesn't love John.
A 0 John doesn't love Mary.
A 1 John loves Mary.
```

With the Document Analyzer with UIMA i made tests and experiments, that ran all right: testElementAnnotator.xml example was running fine and after some analysis of some files that came by default like q001.txt.xmi and q002.txt.xmi the entire test works.



```
<?xml version="1.0" encoding="UTF-8"?>
<typeSystemDescription xmlns="http://uima.apache.org/resourceSpecifier">
  <name>deiis_types</name>
  <description/>
  <version>1.0</version>
  <vendor/>
  <types>
    <typeDescription>
      <name>edu.cmu.
      <description/>
      <supertypeName
      <features>
        <featureDesc
          <name>casP
          <descripti
```

Input Directory: C:\Users\Tania\hw3-137175\src\main\resources\inputData

Output Directory: C:\processed_data

Engine XML Descriptor: C:\Users\Tania\hw3-137175\src\main\resources\descriptors\testElementAnnota

Training Text (optional):

Language: en

Character Encoding: UTF-8

These are the Analyzed Documents.
Select viewer type and double-click file to open.

q001.txt.xmi
q002.txt.xmi

Results Display Format: ● Java Viewer ○ JV user colors ○ HTML ○ XML

```
A 0 Mary doesn't love John.
A 0 John doesn't love Mary.
A 1 John loves Mary.
```

Task 1.2 Creating and Running your CPE (25 pts)

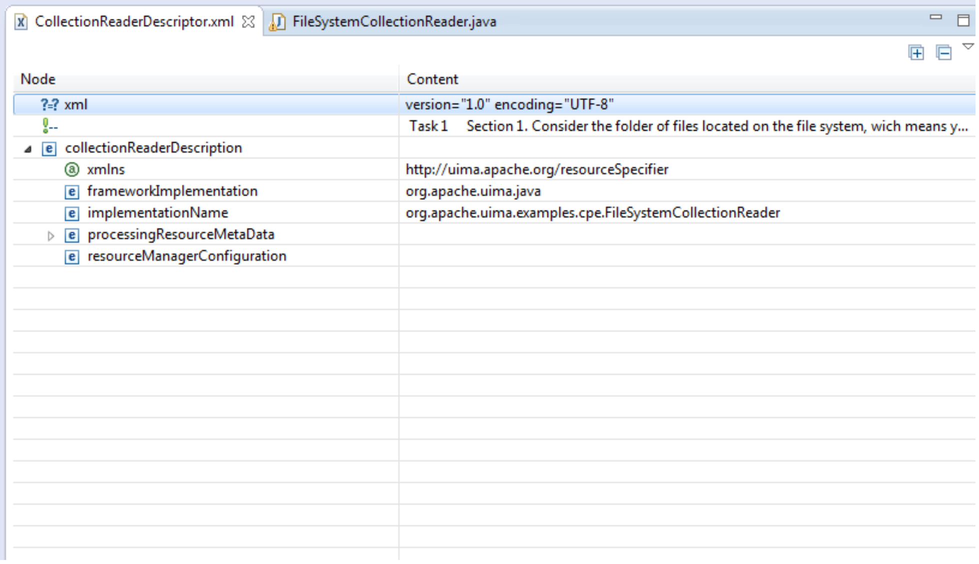
1. (10 pts) The collection reader needs to be general enough to establish a connection to the file source and open a stream to read the content.
2. Task, consider a folder of files located on the file system, where apply org.apache.uima.tools.components.FileSystemCollectionReader directly, and write a Collection Reader descriptor appropied.

   Some lines about the Collection Reader Descriptor that was created (CollectionReaderDescriptor.xml):

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Task 1
     Section 1. Consider the folder of files located on the file system, wich means you can use:
     org.apache.uima.tools.components.FileSystemCollectionReader.
     Then write a Collection Reader Descriptor to fit the needs -->
<collectionReaderDescription xmlns="http://uima.apache.org/resourceSpecifier">
  <frameworkImplementation>org.apache.uima.java</frameworkImplementation>
  <implementationName>org.apache.uima.examples.cpe.FileSystemCollectionReader</implementationName>
  <processingResourceMetaData>
    <name>FileSystemCollectionReaderDescriptor</name>
    <description>FileSystem Collection Reader Descriptor that uses or not CAS Initializer.</description>
    <version>1.0</version>
    <vendor>Apache Enterprise Foundation</vendor>
    <configurationParameters searchStrategy="none">
      <configurationParameter>
        <name>InputDirectory</name>
        <description>this directory contains inputs files</description>
        <type>String</type>
        <multiValued>false</multiValued>
        <mandatory>true</mandatory>
      </configurationParameter>
    <configurationParameter>
        <name>Encoding</name>
        <description>Encoding parameter. The idea is that CAS is responsible to deal with character
encoding issues.</description>
        <type>String</type>
        <multiValued>false</multiValued>
        <mandatory>false</mandatory>
      </configurationParameter>
```

```
<configurationParameter>
  <name>InputDir</name>
  <description>C:\Users\Tania\hw3-137175\src\main\resources\inputData</description>
```

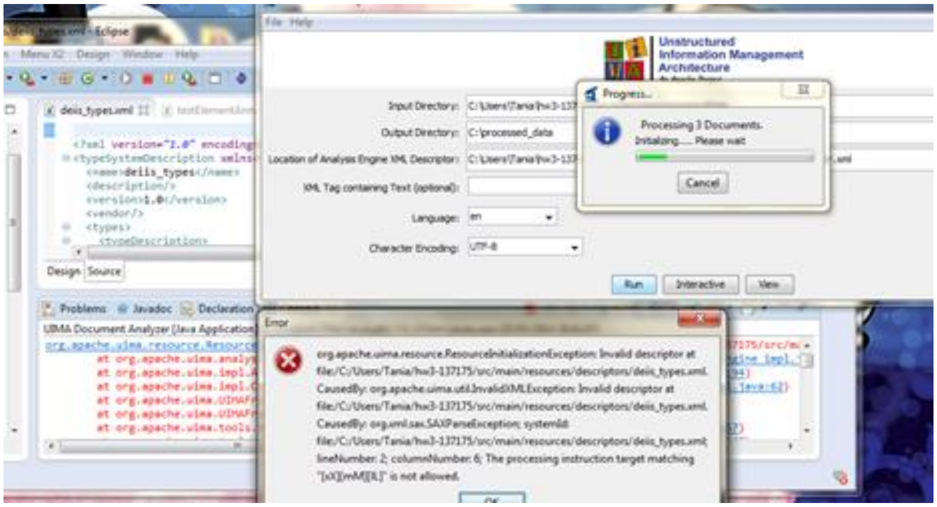
Note: the Java class called (FileSytemCollectionReader.java), was implemented and refactored and it is related to FileSytemCollectionReader which analyze the file CollectionReaderDescriptor.xml



CollectionReaderDescriptor.xml
FileSystemCollectionReader.java

Node	Content
?-? xml	version="1.0" encoding="UTF-8"
---	Task 1 Section 1. Consider the folder of files located on the file system, wich means y...
collectionReaderDescription	
xmlns	http://uima.apache.org/resourceSpecifier
frameworkImplementation	org.apache.uima.java
implementationName	org.apache.uima.examples.cpe.FileSystemCollectionReader
processingResourceMetaData	
resourceManagerConfiguration	

Error message that appears, this one occurred because there was a white space at the beginning of the xml code.



Input Directory: C:\Users\Tania\hw3-137

Output Directory: C:\processed_data

Location of Analysis Engine XML Descriptor: C:\Users\Tania\hw3-137

XML Tag containing Text (optional):

Language: en

Character Encoding: UTF-8

Processing 3 Documents.
Initializing..... Please wait

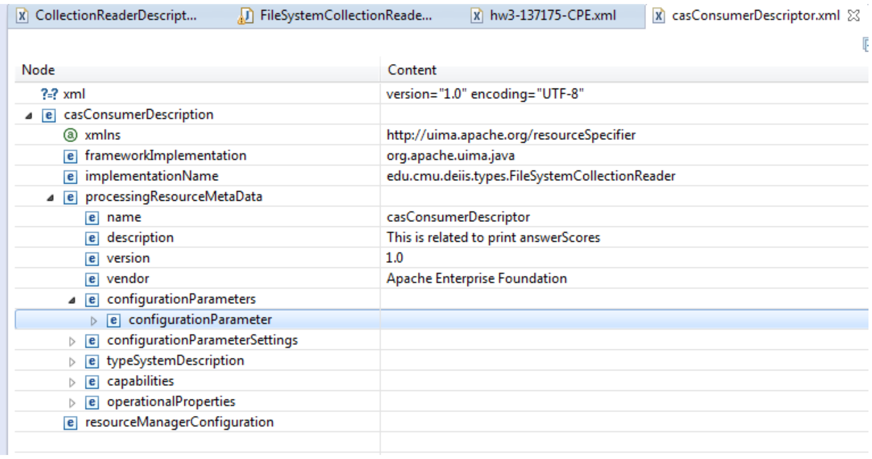
```
org.apache.uima.resource.ResourceInitializationException: Invalid descriptor at
file:/C:/Users/Tania/hw3-137175/src/main/resources/descriptors/deiis_types.xml.
CausedBy: org.apache.uima.util.InvalidXMLException: Invalid descriptor at
file:/C:/Users/Tania/hw3-137175/src/main/resources/descriptors/deiis_types.xml.
CausedBy: org.xml.sax.SAXParseException; systemId:
file:/C:/Users/Tania/hw3-137175/src/main/resources/descriptors/deiis_types.xml;
lineNumber: 2; columnNumber: 6; The processing instruction target matching
"[xX][mM][lL]" is not allowed.
```

Error message: org.apache.uima.ResourceInitializationException: Invalid description at file c:/users/Tania/hw3-137175/src/main/resources/descriptors/deiis_types.xml Caused by: org.xml.sax.SAXParseException.

Delete White space and runs all right!!

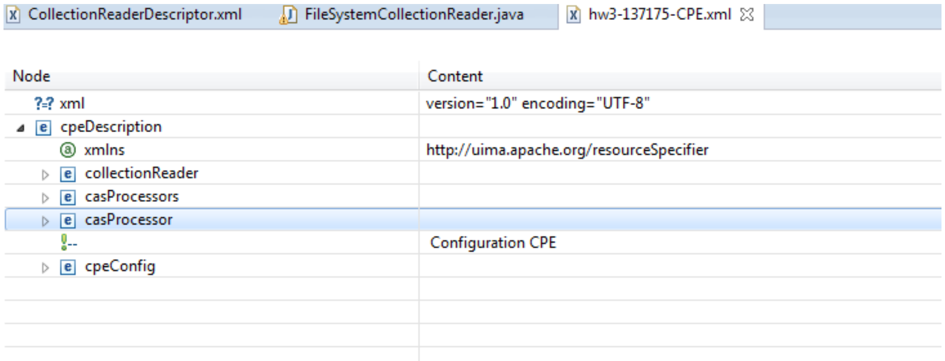
3. (10 pts) You are required to create a Cas Consumer based on the Evaluator component of homework 2, and include it in your CPE pipeline.

```
<?xml version="1.0" encoding="UTF-8"?>
<casConsumerDescription xmlns="http://uima.apache.org/resourceSpecifier">
  <frameworkImplementation>org.apache.uima.java</frameworkImplementation>

  <implementationName>edu.cmu.deiis.types.FileSystemCollectionReader</implementationName>
  <processingResourceMetaData>
    <name>casConsumerDescriptor</name>
    <description>This is related to print answerScores</description>
    <version>1.0</version>
    <vendor>Apache Enterprise Foundation</vendor>
    <configurationParameters>
      <configurationParameter>
        <name>Outputdirectory</name>
        <description>This is the directory where XMI files should be located</description>
                <type>String</type>
```


CollectionReaderDescript...
FileSystemCollectionReade...
hw3-137175-CPE.xml
casConsumerDescriptor.xml

Node	Content
xml	version="1.0" encoding="UTF-8"
casConsumerDescription	
xmlns	http://uima.apache.org/resourceSpecifier
frameworkImplementation	org.apache.uima.java
implementationName	edu.cmu.deiis.types.FileSystemCollectionReader
processingResourceMetaData	
name	casConsumerDescriptor
description	This is related to print answerScores
version	1.0
vendor	Apache Enterprise Foundation
configurationParameters	
configurationParameter	
configurationParameterSettings	
typeSystemDescription	
capabilities	
operationalProperties	
resourceManagerConfiguration	

4. (5 pts) Please name your CPE descriptor as hw3-ID-CPE.xml and put it under src/main/resources/, so that we could easily find the entry point of your pipeline.


CollectionReaderDescriptor.xml
FileSystemCollectionReader.java
hw3-137175-CPE.xml

Node	Content
xml	version="1.0" encoding="UTF-8"
cpeDescription	
xmlns	http://uima.apache.org/resourceSpecifier
collectionReader	
casProcessors	
casProcessor	
	Configuration CPE
cpeConfig	

```
<?xml version="1.0" encoding="UTF-8"?>
<cpeDescription xmlns="http://uima.apache.org/resourceSpecifier">
    <collectionReader>
        <collectionIterator>
            <descriptor>
                <import location="../../../../../../../Program Files/uimaj-2.5.0-bin/apache-
uima/examples/descriptors/collection_reader/FileSystemCollectionReader.xml"/>
            </descriptor>
            <configurationParameterSettings>
                <nameValuePair>
```

```
                    <name>InputDirectory</name>
                    <value>
                        <string>C:\</string>
                    </value>
                </nameValuePair>
            </configurationParameterSettings>
        </collectionIterator>
    </collectionReader>

    <casProcessors casPoolSize="3" processingUnitThreadCount="1"></casProcessors>

     <casProcessor name="hw2-137175-aae" deployment="integrated">
       <descriptor>
         <import location="/hw3-137175/src/main/resources/hw2-137175-aae.xml"/>
       </descriptor>
    <deploymentParameters/>
```

Task 2

Deployment Architecture with UIMA-AS

Integrate a remote UIMA-AS service (Stanford CoreNLP) into the CPE pipeline, and deploy the aggregate analysis engine in homework 2 as an UIMA-AS service.

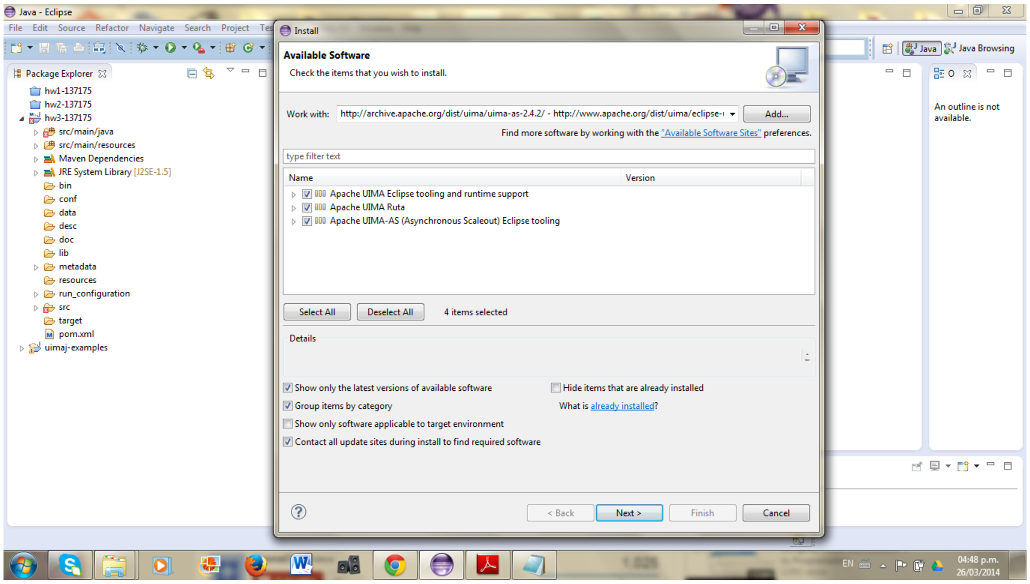
Task 2.1 Learning UIMA-AS,

I read about the information that came on each link, the first one describes the concepts about UIMA-AS the other two makes a description about UIMA-AS and how to apply it for making some experiments with data.

Task 2.2 Creating an UIMA-AS client (25 pts)

Checking that UIMA-AS was installed on Eclipse graphically by the Available Software Tool:

1. UIMA AS binary package installation.



Install

Available Software

Check the items that you wish to install.

Work with: http://archive.apache.org/dist/uima/uima-as-2.4.2/ - http://www.apache.org/dist/uima/eclipse-

Add...

Find more software by working with the "Available Software Sites" preferences.

type filter text

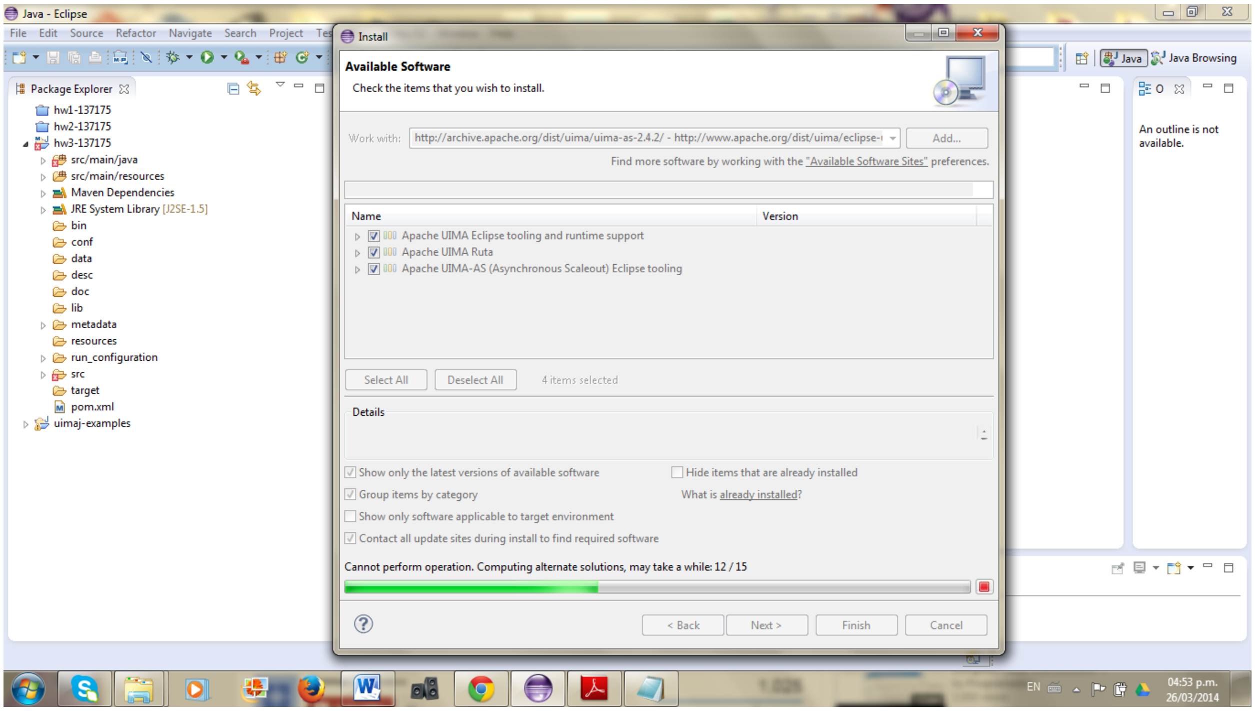
Name	Version
☑ Apache UIMA Eclipse tooling and runtime support	
☑ Apache UIMA Ruta	
☑ Apache UIMA-AS (Asynchronous Scaleout) Eclipse tooling	

Select All   Deselect All   4 items selected

Details

☑ Show only the latest versions of available software
☐ Hide items that are already installed
☑ Group items by category
What is already installed?
☐ Show only software applicable to target environment
☑ Contact all update sites during install to find required software

< Back   Next >   Finish   Cancel



Available Software

Check the items that you wish to install.

Work with: http://archive.apache.org/dist/uima/uima-as-2.4.2/ - http://www.apache.org/dist/uima/eclipse-

Add...

Find more software by working with the "Available Software Sites" preferences.

Name	Version
☑ Apache UIMA Eclipse tooling and runtime support	
☑ Apache UIMA Ruta	
☑ Apache UIMA-AS (Asynchronous Scaleout) Eclipse tooling	

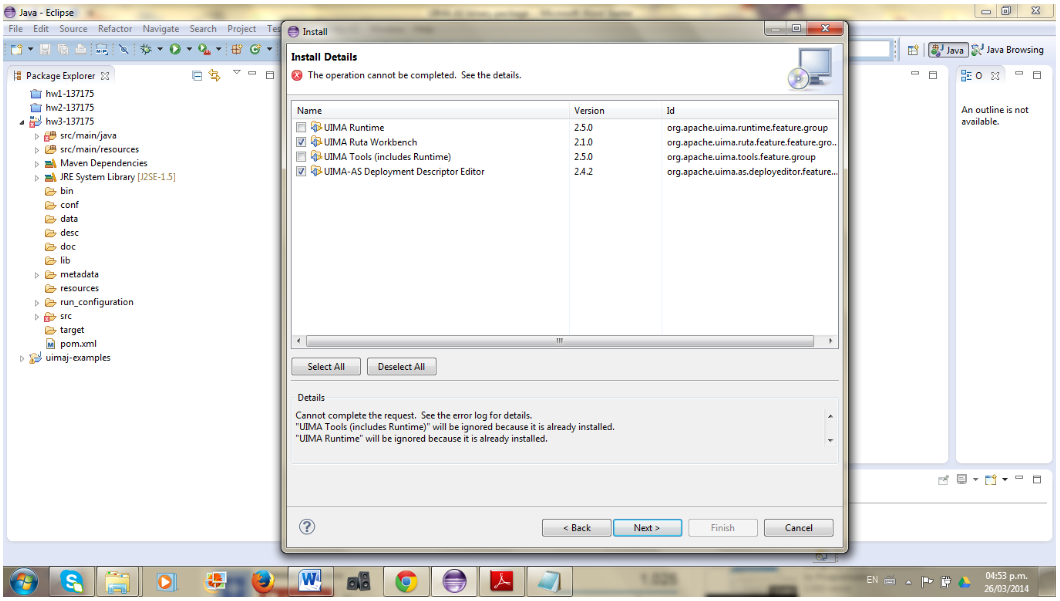
Select All · Deselect All · 4 items selected

Details

☑ Show only the latest versions of available software
☐ Hide items that are already installed
☑ Group items by category
What is already installed?
☐ Show only software applicable to target environment
☑ Contact all update sites during install to find required software

Cannot perform operation. Computing alternate solutions, may take a while: 12 / 15

< Back · Next > · Finish · Cancel



Install Details

The operation cannot be completed. See the details.

Name	Version	Id
☐ UIMA Runtime	2.5.0	org.apache.uima.runtime.feature.group
☑ UIMA Ruta Workbench	2.1.0	org.apache.uima.ruta.feature.feature.gro...
☐ UIMA Tools (includes Runtime)	2.5.0	org.apache.uima.tools.feature.group
☑ UIMA-AS Deployment Descriptor Editor	2.4.2	org.apache.uima.as.deployeditor.feature...

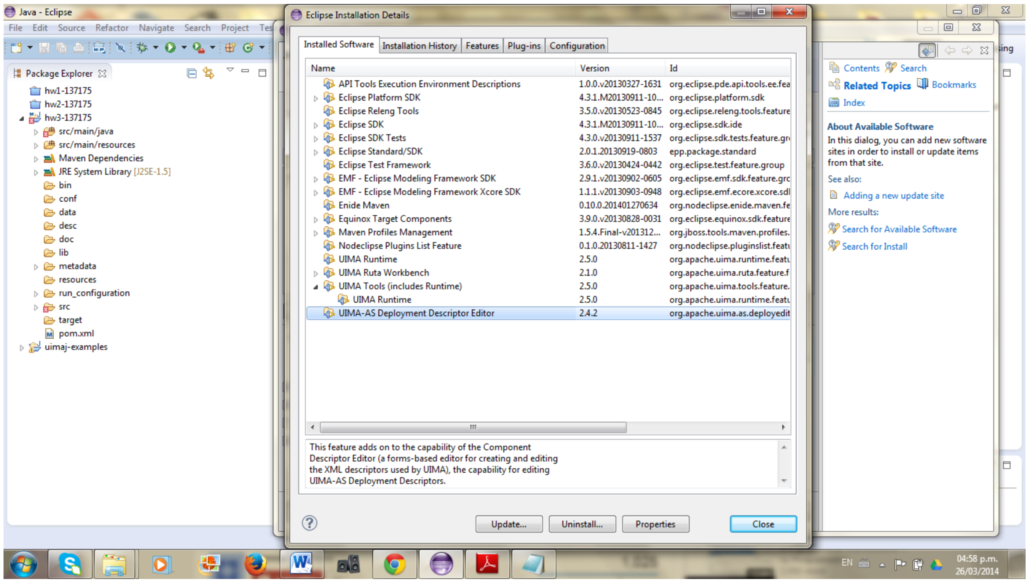
Select All · Deselect All

Details

```
Cannot complete the request.  See the error log for details.
"UIMA Tools (includes Runtime)" will be ignored because it is already installed.
"UIMA Runtime" will be ignored because it is already installed.
```

< Back · Next > · Finish · Cancel

Finally, i realise that UIMA AS was installed in another moment, so is ready, UIMA AS version is 2.4.2



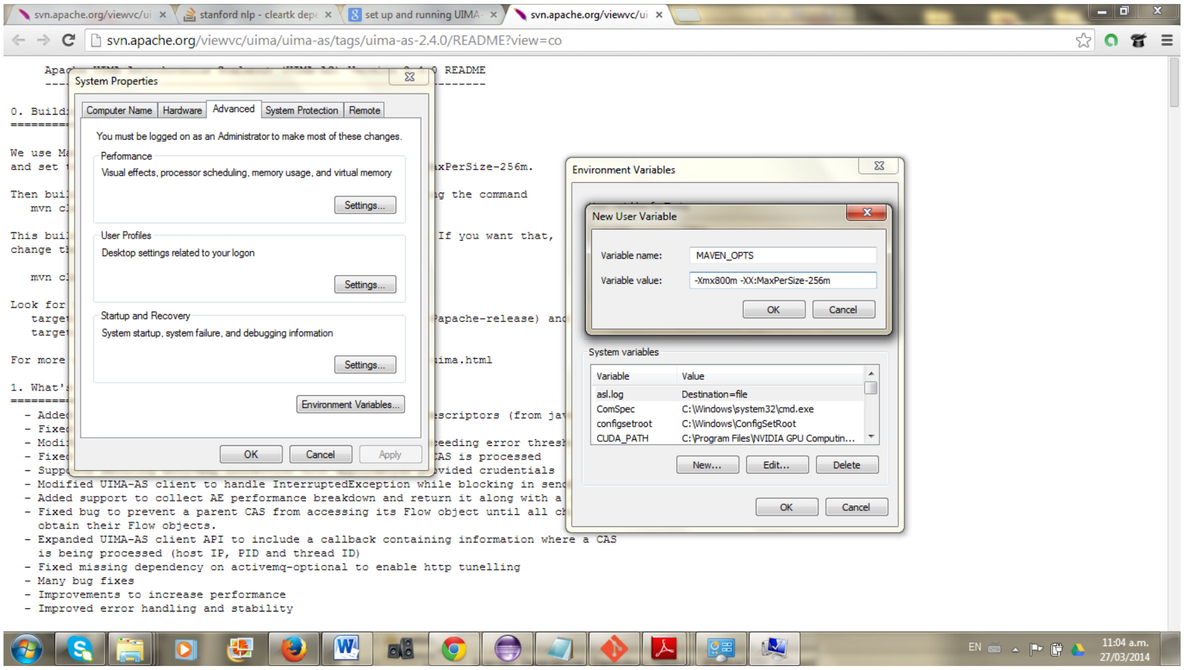
Eclipse Installation Details

Name	Version	Id
API Tools Execution Environment Descriptions	1.0.0.v20130327-1631	org.eclipse.pde.api.tools.ee.fea
Eclipse Platform SDK	4.3.1.M20130911-10...	org.eclipse.platform.sdk
Eclipse Releng Tools	3.5.0.v20130523-0845	org.eclipse.releng.tools.feature
Eclipse SDK	4.3.1.M20130911-10...	org.eclipse.sdk.ide
Eclipse SDK Tests	4.3.0.v20130911-1537	org.eclipse.sdk.tests.feature.gr
Eclipse Standard/SDK	2.0.1.20130919-0803	epp.package.standard
Eclipse Test Framework	3.6.0.v20130424-0442	org.eclipse.test.feature.group
EMF - Eclipse Modeling Framework SDK	2.9.1.v20130902-0605	org.eclipse.emf.sdk.feature.grc
EMF - Eclipse Modeling Framework Xcore SDK	1.1.1.v20130903-0948	org.eclipse.emf.ecore.xcore.sdl
Enide Maven	0.10.0.201401270634	org.nodeclipse.enide.maven.fe
Equinox Target Components	3.9.0.v20130828-0031	org.eclipse.equinox.sdk.feature
Maven Profiles Management	1.5.4.Final-v201312...	org.jboss.tools.maven.profiles.
Nodeclipse Plugins List Feature	0.1.0.20130811-1427	org.nodeclipse.pluginslist.featu
UIMA Runtime	2.5.0	org.apache.uima.runtime.featu
UIMA Ruta Workbench	2.1.0	org.apache.uima.ruta.feature.f
UIMA Tools (includes Runtime)	2.5.0	org.apache.uima.tools.feature.
UIMA Runtime	2.5.0	org.apache.uima.runtime.featu
UIMA-AS Deployment Descriptor Editor	2.4.2	org.apache.uima.as.deployedit

This feature adds on to the capability of the Component Descriptor Editor (a forms-based editor for creating and editing the XML descriptors used by UIMA), the capability for editing UIMA-AS Deployment Descriptors.

To configure UIMA-AS was the next one that is explained step by step in the link: http://svn.apache.org/viewvc/uima/uima-as/tags/uima-as-2.4.0/README?view=co, following the steps that are explained on README about UIMA-as.

1. Set the environment variable MAVEN_OPTS to -Xmx800m -XX:MaxPerSize-256m.



svn.apache.org/viewvc/uima/uima-as/tags/uima-as-2.4.0/README?view=co

```
  - Modified UIMA-AS client to handle InterruptedException while blocking in send
  - Added support to collect AE performance breakdown and return it along with a
  - Fixed bug to prevent a parent CAS from accessing its Flow object until all ch
    obtain their Flow objects.
  - Expanded UIMA-AS client API to include a callback containing information where a CAS
    is being processed (host IP, PID and thread ID)
  - Fixed missing dependency on activemq-optional to enable http tunelling
  - Many bug fixes
  - Improvements to increase performance
  - Improved error handling and stability
```

System Properties — Advanced

You must be logged on as an Administrator to make most of these changes.

Performance: Visual effects, processor scheduling, memory usage, and virtual memory

User Profiles: Desktop settings related to your logon

Startup and Recovery: System startup, system failure, and debugging information

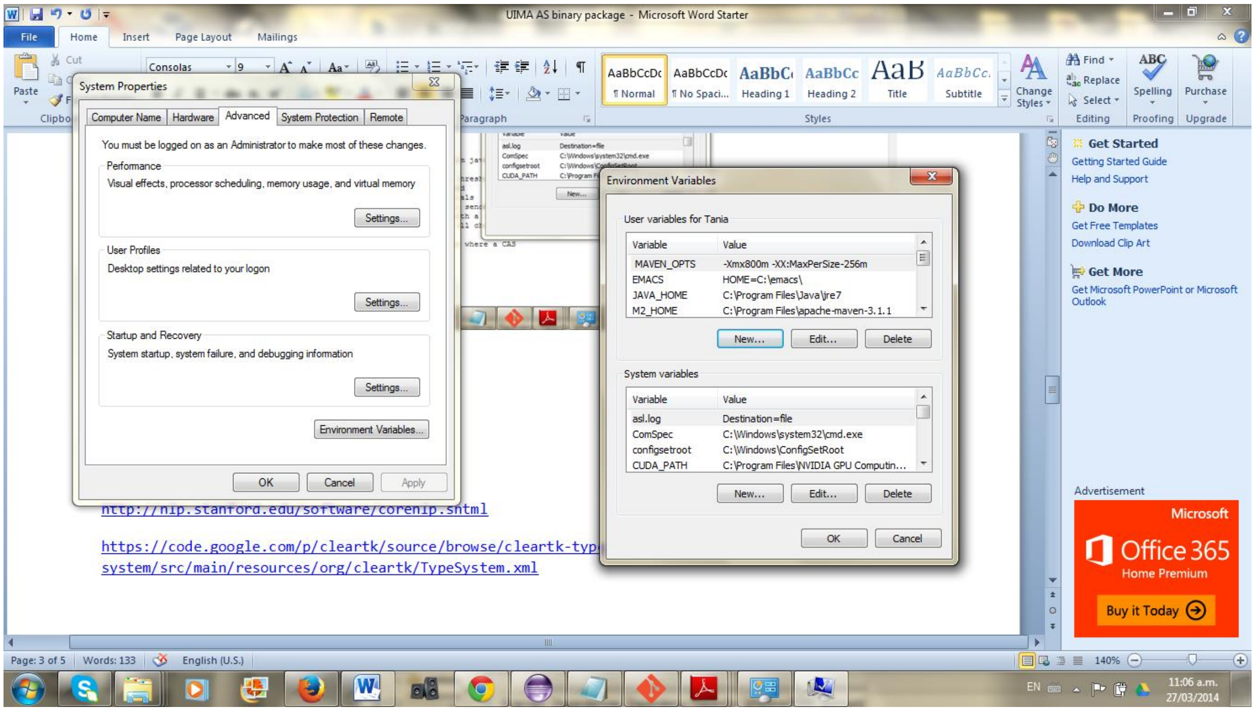
New User Variable

Variable name: MAVEN_OPTS

Variable value: -Xmx800m -XX:MaxPerSize-256m

System variables

Variable	Value
asl.log	Destination=file
ComSpec	C:\Windows\system32\cmd.exe
configsetroot	C:\Windows\ConfigSetRoot
CUDA_PATH	C:\Program Files\NVIDIA GPU Computin...



System Properties

Computer Name | Hardware | Advanced | System Protection | Remote

You must be logged on as an Administrator to make most of these changes.

Performance
Visual effects, processor scheduling, memory usage, and virtual memory

User Profiles
Desktop settings related to your logon

Startup and Recovery
System startup, system failure, and debugging information

Environment Variables

User variables for Tania

Variable	Value
MAVEN_OPTS	-Xmx800m -XX:MaxPerSize-256m
EMACS	HOME=C:\emacs\
JAVA_HOME	C:\Program Files\Java\jre7
M2_HOME	C:\Program Files\apache-maven-3.1.1

System variables

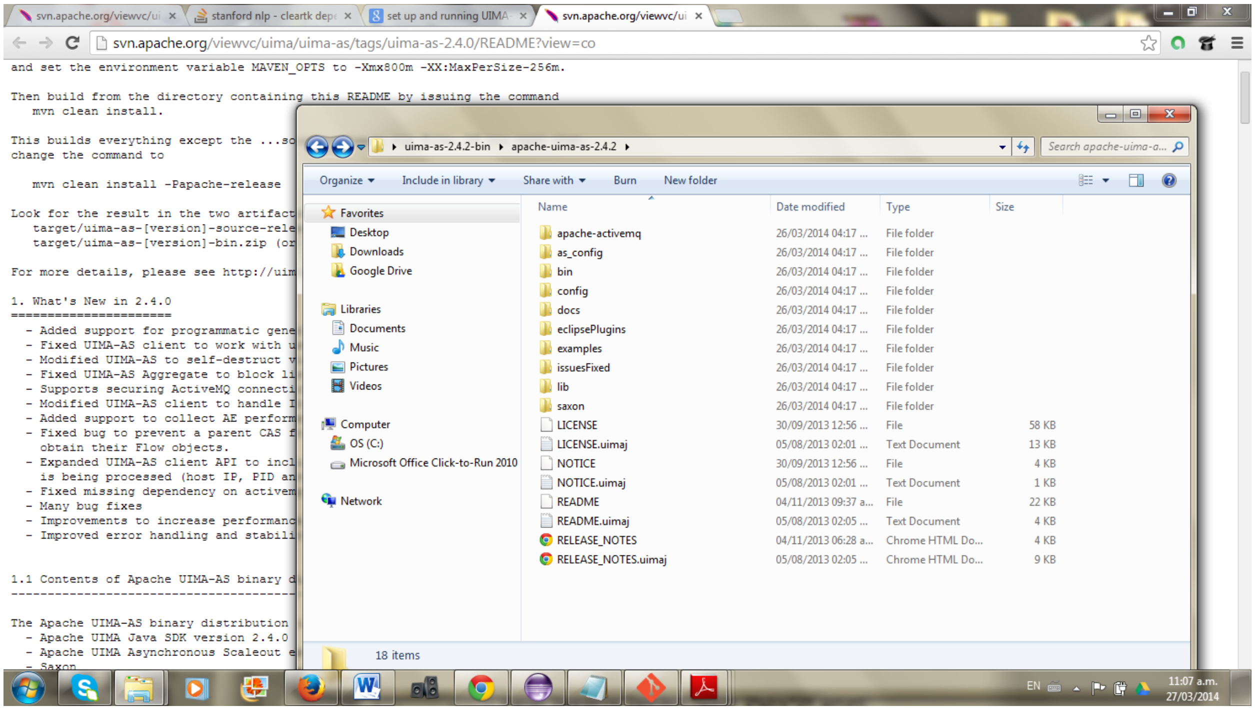
Variable	Value
asl.log	Destination=file
ComSpec	C:\Windows\system32\cmd.exe
configsetroot	C:\Windows\ConfigSetRoot
CUDA_PATH	C:\Program Files\NVIDIA GPU Computin...

http://nlp.stanford.edu/software/corenlp.shtml

https://code.google.com/p/cleartk/source/browse/cleartk-typ
system/src/main/resources/org/cleartk/TypeSystem.xml

Then build from the directory containing this README by using the command for MAVEN environment.

- ➢ mvn clean install


svn.apache.org/viewvc/ui
stanford nlp - cleartk depe
set up and running UIMA
svn.apache.org/viewvc/ui
svn.apache.org/viewvc/uima/uima-as/tags/uima-as-2.4.0/README?view=co
11:07 a.m.
27/03/2014

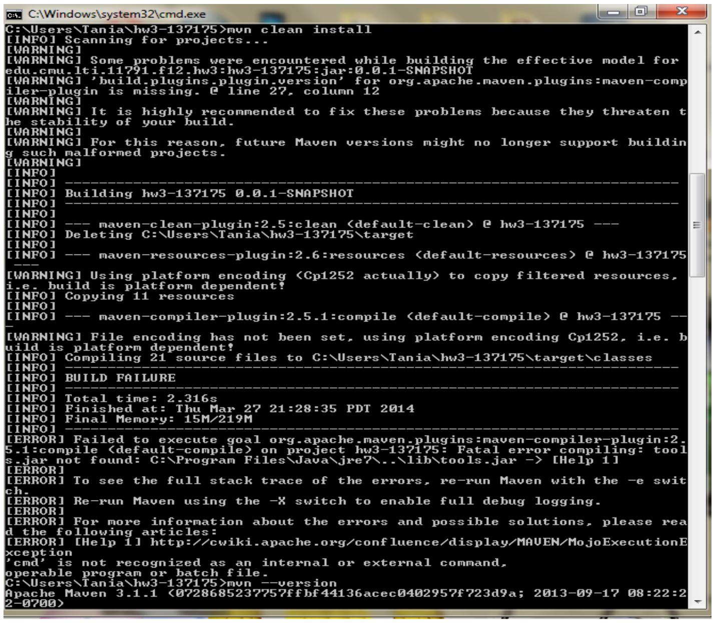
```
and set the environment variable MAVEN_OPTS to -Xmx800m -XX:MaxPerSize-256m.

Then build from the directory containing this README by issuing the command
   mvn clean install.

This builds everything except the ...so
change the command to

   mvn clean install -Papache-release

Look for the result in the two artifact
   target/uima-as-[version]-source-rele
   target/uima-as-[version]-bin.zip (or

For more details, please see http://uim

1. What's New in 2.4.0
======================
  - Added support for programmatic gene
  - Fixed UIMA-AS client to work with u
  - Modified UIMA-AS to self-destruct v
  - Fixed UIMA-AS Aggregate to block li
  - Supports securing ActiveMQ connecti
  - Modified UIMA-AS client to handle I
  - Added support to collect AE perform
  - Fixed bug to prevent a parent CAS f
    obtain their Flow objects.
  - Expanded UIMA-AS client API to incl
    is being processed (host IP, PID an
  - Fixed missing dependency on activem
  - Many bug fixes
  - Improvements to increase performanc
  - Improved error handling and stabili


1.1 Contents of Apache UIMA-AS binary d
---------------------------------------

The Apache UIMA-AS binary distribution
  - Apache UIMA Java SDK version 2.4.0
  - Apache UIMA Asynchronous Scaleout e
  - Saxon
```

uima-as-2.4.2-bin ▸ apache-uima-as-2.4.2 ▸

Name	Date modified	Type	Size
apache-activemq	26/03/2014 04:17 ...	File folder	
as_config	26/03/2014 04:17 ...	File folder	
bin	26/03/2014 04:17 ...	File folder	
config	26/03/2014 04:17 ...	File folder	
docs	26/03/2014 04:17 ...	File folder	
eclipsePlugins	26/03/2014 04:17 ...	File folder	
examples	26/03/2014 04:17 ...	File folder	
issuesFixed	26/03/2014 04:17 ...	File folder	
lib	26/03/2014 04:17 ...	File folder	
saxon	26/03/2014 04:17 ...	File folder	
LICENSE	30/09/2013 12:56 ...	File	58 KB
LICENSE.uimaj	05/08/2013 02:01 ...	Text Document	13 KB
NOTICE	30/09/2013 12:56 ...	File	4 KB
NOTICE.uimaj	05/08/2013 02:01 ...	Text Document	1 KB
README	04/11/2013 09:37 a...	File	22 KB
README.uimaj	05/08/2013 02:05 ...	Text Document	4 KB
RELEASE_NOTES	04/11/2013 06:28 a...	Chrome HTML Do...	4 KB
RELEASE_NOTES.uimaj	05/08/2013 02:05 ...	Chrome HTML Do...	9 KB

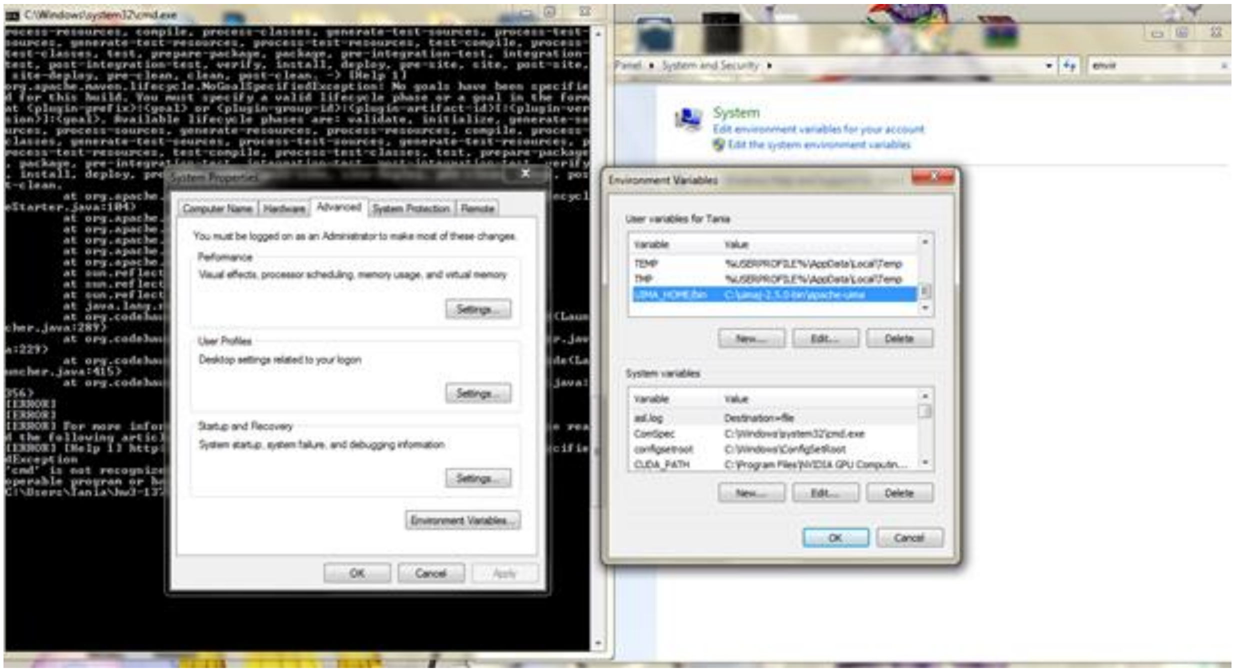
18 items

Many problems appears. issue: cmd is not recognized as an internal or external command. searching on internet then one option is to reinstall Java, i did that and magically all workjust fine!!



```
C:\Users\Tania\hw3-137175>mvn clean install
[INFO] Scanning for projects...
[WARNING]
[WARNING] Some problems were encountered while building the effective model for
edu.cmu.lti.11791.f12.hw3:hw3-137175:jar:0.0.1-SNAPSHOT
[WARNING] 'build.plugins.plugin.version' for org.apache.maven.plugins:maven-comp
iler-plugin is missing. @ line 27, column 12
[WARNING]
[WARNING] It is highly recommended to fix these problems because they threaten t
he stability of your build.
[WARNING]
[WARNING] For this reason, future Maven versions might no longer support buildin
g such malformed projects.
[WARNING]
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] Building hw3-137175 0.0.1-SNAPSHOT
[INFO] ------------------------------------------------------------------------
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ hw3-137175 ---
[INFO] Deleting C:\Users\Tania\hw3-137175\target
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ hw3-137175
 ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources,
i.e. build is platform dependent!
[INFO] Copying 11 resources
[INFO]
[INFO] --- maven-compiler-plugin:2.5.1:compile (default-compile) @ hw3-137175 --
-
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. b
uild is platform dependent!
[INFO] Compiling 21 source files to C:\Users\Tania\hw3-137175\target\classes
[INFO] ------------------------------------------------------------------------
[INFO] BUILD FAILURE
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 2.316s
[INFO] Finished at: Thu Mar 27 21:28:35 PDT 2014
[INFO] Final Memory: 15M/219M
[INFO] ------------------------------------------------------------------------
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:2.
5.1:compile (default-compile) on project hw3-137175: Fatal error compiling: tool
s.jar not found: C:\Program Files\Java\jre7\..\lib\tools.jar -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e swit
ch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please rea
d the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoExecutionE
xception
'cmd' is not recognized as an internal or external command,
operable program or batch file.
C:\Users\Tania\hw3-137175>mvn --version
Apache Maven 3.1.1 (0728685237757ffbf44136acec0402957f723d9a; 2013-09-17 08:22:2
2-0700)
```

UIMA_HOME variables



```
rocess-resources, compile, process-classes, generate-test-sources, process-test-
sources, generate-test-resources, process-test-resources, test-compile, process-
test-classes, test, prepare-package, package, pre-integration-test, integration-
test, post-integration-test, verify, install, deploy, pre-site, site, post-site,
 site-deploy, pre-clean, clean, post-clean. -> [Help 1]
org.apache.maven.lifecycle.NoGoalSpecifiedException: No goals have been specifie
d for this build. You must specify a valid lifecycle phase or a goal in the form
at <plugin-prefix>:<goal> or <plugin-group-id>:<plugin-artifact-id>[:<plugin-ver
sion>]:<goal>. Available lifecycle phases are: validate, initialize, generate-so
urces, process-sources, generate-resources, process-resources, compile, process-
classes, generate-test-sources, process-test-sources, generate-test-resources, p
rocess-test-resources, test-compile, process-test-classes, test, prepare-package
```

You must be logged on as an Administrator to make most of these changes.

Performance

Visual effects, processor scheduling, memory usage, and virtual memory

User Profiles

Desktop settings related to your logon

Startup and Recovery

System startup, system failure, and debugging information

User variables for Tania

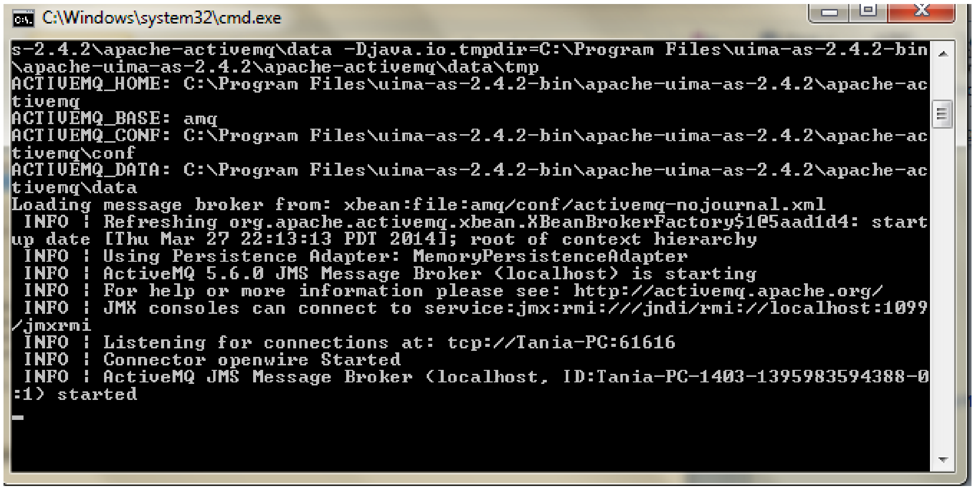
Variable	Value
TEMP	%USERPROFILE%\AppData\Local\Temp
TMP	%USERPROFILE%\AppData\Local\Temp
UIMA_HOME/bin	C:\uimaj-2.5.0-bin\apache-uima

System variables

Variable	Value
asl.log	Destination=file
ComSpec	C:\Windows\system32\cmd.exe
configsetroot	C:\Windows\ConfigSetRoot
CUDA_PATH	C:\Program Files\NVIDIA GPU Computin...

In the next path is located the UIMA-AS, C:\Users\Tania\apache-uima-as-2.4.2\bin

Running the file $startBroker, then appears this execution.



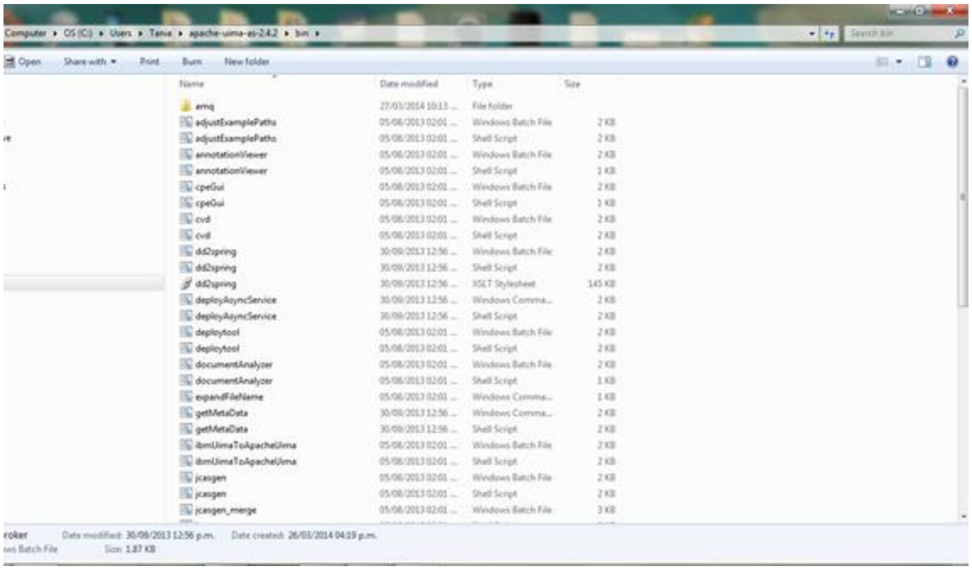
```
s-2.4.2\apache-activemq\data -Djava.io.tmpdir=C:\Program Files\uima-as-2.4.2-bin
\apache-uima-as-2.4.2\apache-activemq\data\tmp
ACTIVEMQ_HOME: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq
ACTIVEMQ_BASE: amq
ACTIVEMQ_CONF: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq\conf
ACTIVEMQ_DATA: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq\data
Loading message broker from: xbean:file:amq/conf/activemq-nojournal.xml
 INFO | Refreshing org.apache.activemq.xbean.XBeanBrokerFactory$1@5aad1d4: start
up date [Thu Mar 27 22:13:13 PDT 2014]; root of context hierarchy
 INFO | Using Persistence Adapter: MemoryPersistenceAdapter
 INFO | ActiveMQ 5.6.0 JMS Message Broker (localhost) is starting
 INFO | For help or more information please see: http://activemq.apache.org/
 INFO | JMX consoles can connect to service:jmx:rmi:///jndi/rmi://localhost:1099
/jmxrmi
 INFO | Listening for connections at: tcp://Tania-PC:61616
 INFO | Connector openwire Started
 INFO | ActiveMQ JMS Message Broker (localhost, ID:Tania-PC-1403-1395983594388-0
:1) started
_
```

Listening for conections at: tcp://Tania-PC:61616

Connector openwire Started

ActiveMQ JMS Message Broker <localhost, ID:Tania-PC-1403-1395983594388-0:1> started

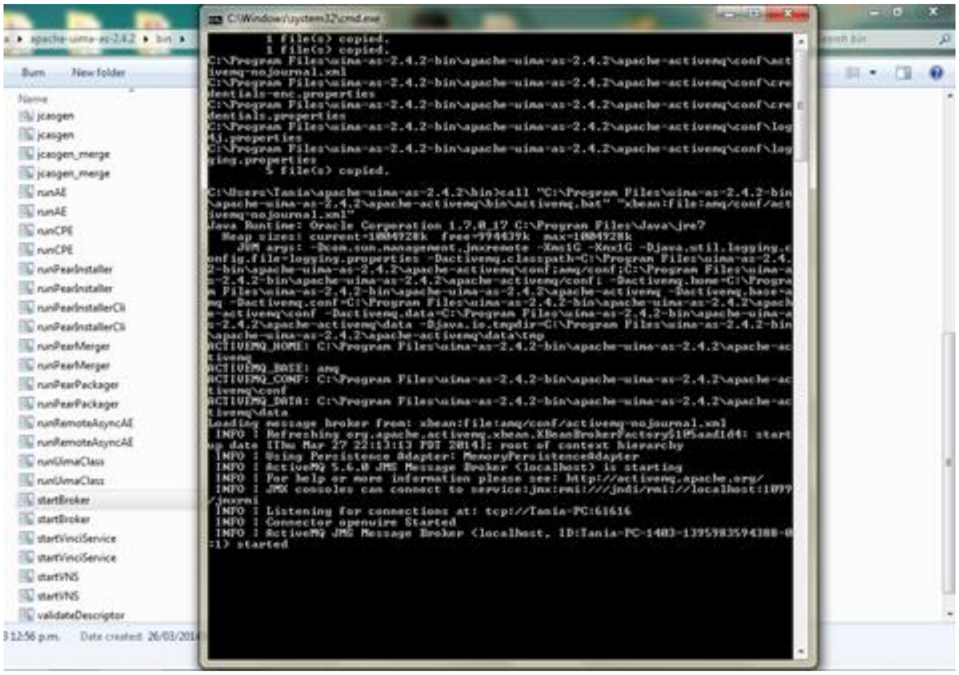
Then the amq folder is created after $ startBroker file was executed.



Computer ▸ OS (C:) ▸ Users ▸ Tania ▸ apache-uima-as-2.4.2 ▸ bin ▸
Search bin
Open
Share with ▾
Print
Burn
New folder

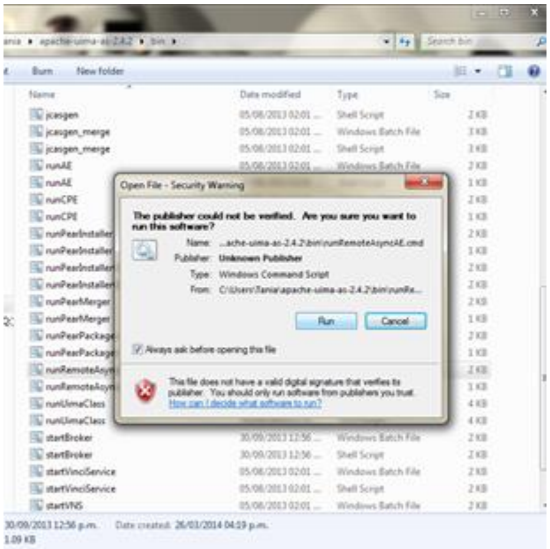
Name	Date modified	Type	Size
amq	27/03/2014 10:13 ...	File folder	
adjustExamplePaths	05/08/2013 02:01 ...	Windows Batch File	2 KB
adjustExamplePaths	05/08/2013 02:01 ...	Shell Script	2 KB
annotationViewer	05/08/2013 02:01 ...	Windows Batch File	2 KB
annotationViewer	05/08/2013 02:01 ...	Shell Script	1 KB
cpeGui	05/08/2013 02:01 ...	Windows Batch File	2 KB
cpeGui	05/08/2013 02:01 ...	Shell Script	1 KB
cvd	05/08/2013 02:01 ...	Windows Batch File	2 KB
cvd	05/08/2013 02:01 ...	Shell Script	2 KB
dd2spring	30/09/2013 12:56 ...	Windows Batch File	2 KB
dd2spring	30/09/2013 12:56 ...	Shell Script	2 KB
dd2spring	30/09/2013 12:56 ...	XSLT Stylesheet	145 KB
deployAsyncService	30/09/2013 12:56 ...	Windows Comma...	2 KB
deployAsyncService	30/09/2013 12:56 ...	Shell Script	2 KB
deploytool	05/08/2013 02:01 ...	Windows Batch File	2 KB
deploytool	05/08/2013 02:01 ...	Shell Script	2 KB
documentAnalyzer	05/08/2013 02:01 ...	Windows Batch File	2 KB
documentAnalyzer	05/08/2013 02:01 ...	Shell Script	1 KB
expandFileName	05/08/2013 02:01 ...	Windows Comma...	1 KB
getMetaData	30/09/2013 12:56 ...	Windows Comma...	2 KB
getMetaData	30/09/2013 12:56 ...	Shell Script	2 KB
ibmUimaToApacheUima	05/08/2013 02:01 ...	Windows Batch File	2 KB
ibmUimaToApacheUima	05/08/2013 02:01 ...	Shell Script	2 KB
jcasgen	05/08/2013 02:01 ...	Windows Batch File	2 KB
jcasgen	05/08/2013 02:01 ...	Shell Script	2 KB
jcasgen_merge	05/08/2013 02:01 ...	Windows Batch File	3 KB

roker Date modified: 30/09/2013 12:56 p.m. Date created: 26/03/2014 04:19 p.m.
ws Batch File Size: 1.87 KB



```
        1 file(s) copied.
        1 file(s) copied.
C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq\conf\act
ivemq-nojournal.xml
C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq\conf\cre
dentials-enc.properties
C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq\conf\cre
dentials.properties
C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq\conf\log
4j.properties
C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq\conf\log
ging.properties
        5 file(s) copied.

C:\Users\Tania\apache-uima-as-2.4.2\bin>call "C:\Program Files\uima-as-2.4.2-bin
\apache-uima-as-2.4.2\apache-activemq\bin\activemq.bat" "xbean:file:amq/conf/act
ivemq-nojournal.xml"
Java Runtime: Oracle Corporation 1.7.0_17 C:\Program Files\Java\jre7
  Heap sizes: current=1004928k  free=994439k  max=1004928k
    JVM args: -Dcom.sun.management.jmxremote -Xms1G -Xmx1G -Djava.util.logging.c
onfig.file=logging.properties -Dactivemq.classpath=C:\Program Files\uima-as-2.4.
2-bin\apache-uima-as-2.4.2\apache-activemq\conf;amq/conf;C:\Program Files\uima-a
s-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq/conf1 -Dactivemq.home=C:\Progra
m Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-activemq -Dactivemq.base=a
mq -Dactivemq.conf=C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apach
e-activemq\conf -Dactivemq.data=C:\Program Files\uima-as-2.4.2-bin\apache-uima-a
s-2.4.2\apache-activemq\data -Djava.io.tmpdir=C:\Program Files\uima-as-2.4.2-bin
\apache-uima-as-2.4.2\apache-activemq\data\tmp
ACTIVEMQ_HOME: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq
ACTIVEMQ_BASE: amq
ACTIVEMQ_CONF: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq\conf
ACTIVEMQ_DATA: C:\Program Files\uima-as-2.4.2-bin\apache-uima-as-2.4.2\apache-ac
tivemq\data
Loading message broker from: xbean:file:amq/conf/activemq-nojournal.xml
 INFO | Refreshing org.apache.activemq.xbean.XBeanBrokerFactory$1@5aad1d4: start
up date [Thu Mar 27 22:13:13 PDT 2014]; root of context hierarchy
 INFO | Using Persistence Adapter: MemoryPersistenceAdapter
 INFO | ActiveMQ 5.6.0 JMS Message Broker (localhost) is starting
 INFO | For help or more information please see: http://activemq.apache.org/
 INFO | JMX consoles can connect to service:jmx:rmi:///jndi/rmi://localhost:1099
/jmxrmi
 INFO | Listening for connections at: tcp://Tania-PC:61616
 INFO | Connector openwire Started
 INFO | ActiveMQ JMS Message Broker (localhost, ID:Tania-PC-1403-1395983594388-0
:1) started
```

The next step was: run the runRemoteAsyncAE.



Open File - Security Warning

The publisher could not be verified. Are you sure you want to run this software?

Name: ...ache-uima-as-2.4.2\bin\runRemoteAsyncAE.cmd
Publisher: Unknown Publisher
Type: Windows Command Script
From: C:\Users\Tania\apache-uima-as-2.4.2\bin\runRe...

Run | Cancel

☑ Always ask before opening this file

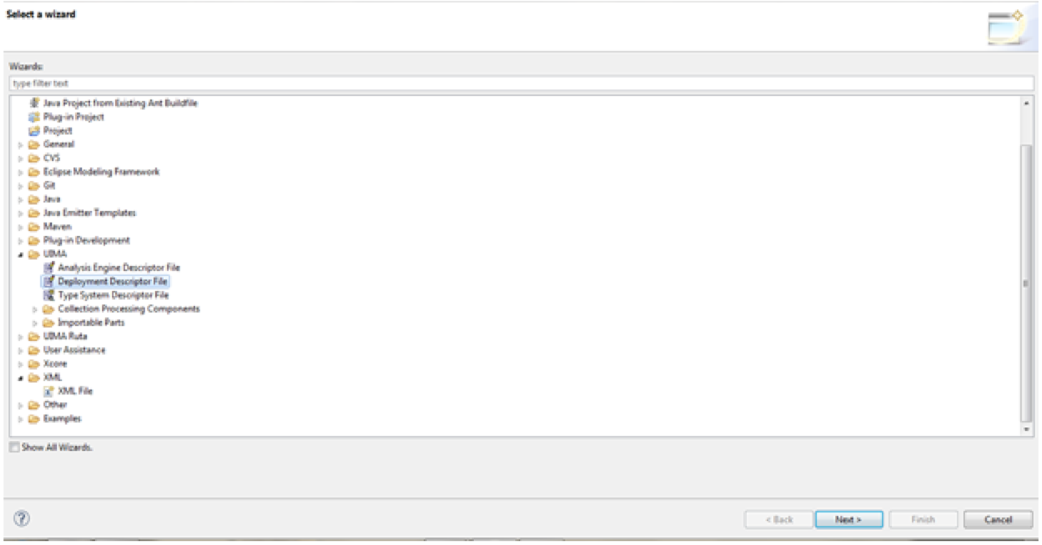
This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust. How can I decide what software to run?

Task 2.2 Creating an UIMA-AS client

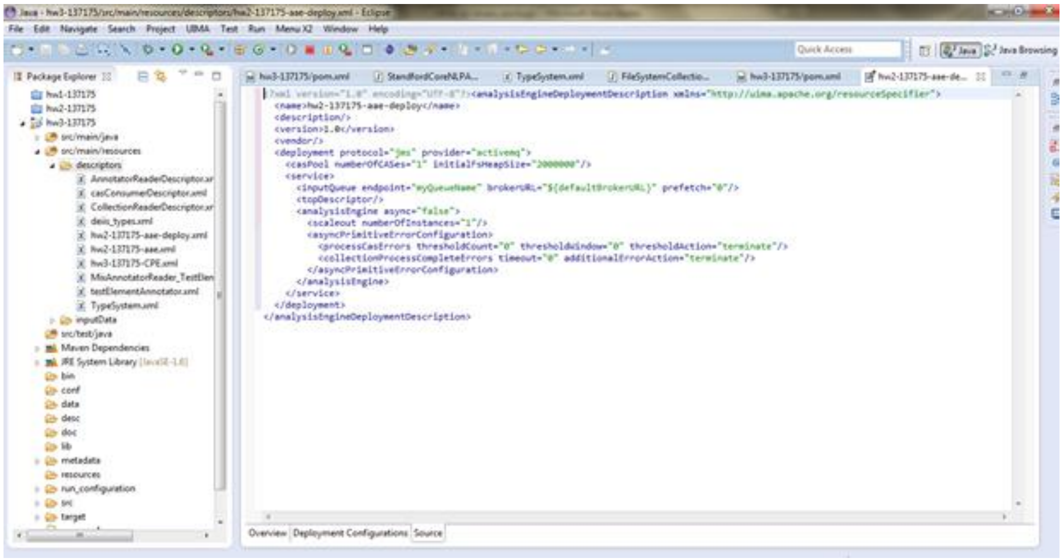
Create a UIMA-AS client descriptor (scnlp-137175-client.xml) for a remote UIMA-AS service (Stanford Core NLP), and integrate your client with your CPE pipeline.

UIMA-AS service provided for this homework is the Stanford CoreNLP. Annotator from Clear TK toolkit. This annotator reads the DocumentText form JCas and do tokenization, sentence splitting, POS tagging, lemmatization, NER, syntactic parsing, and coreference resolution.

Creating the Deployment Descriptor File

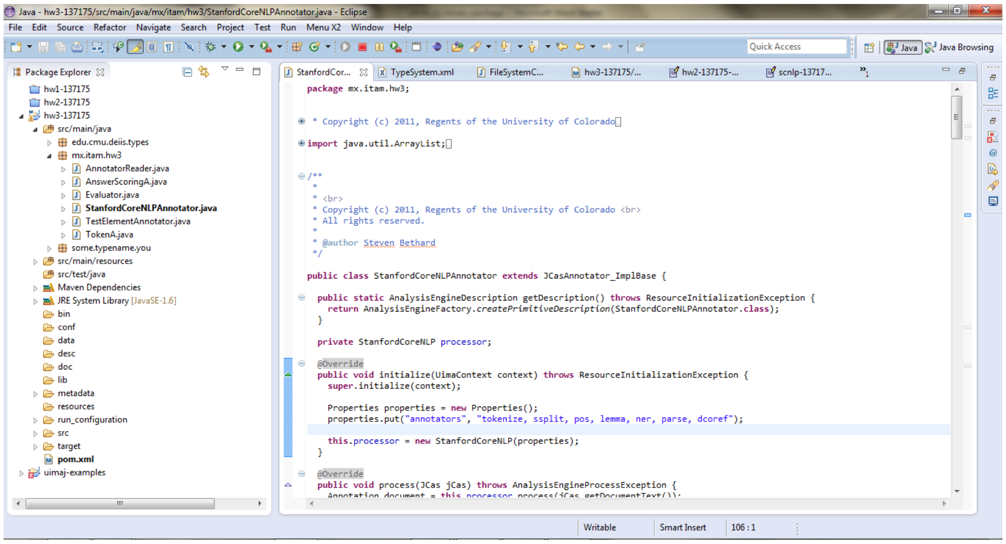


Creating the next files hw2-137175-aae-deploy.xml and scnlp-137175-client.xml



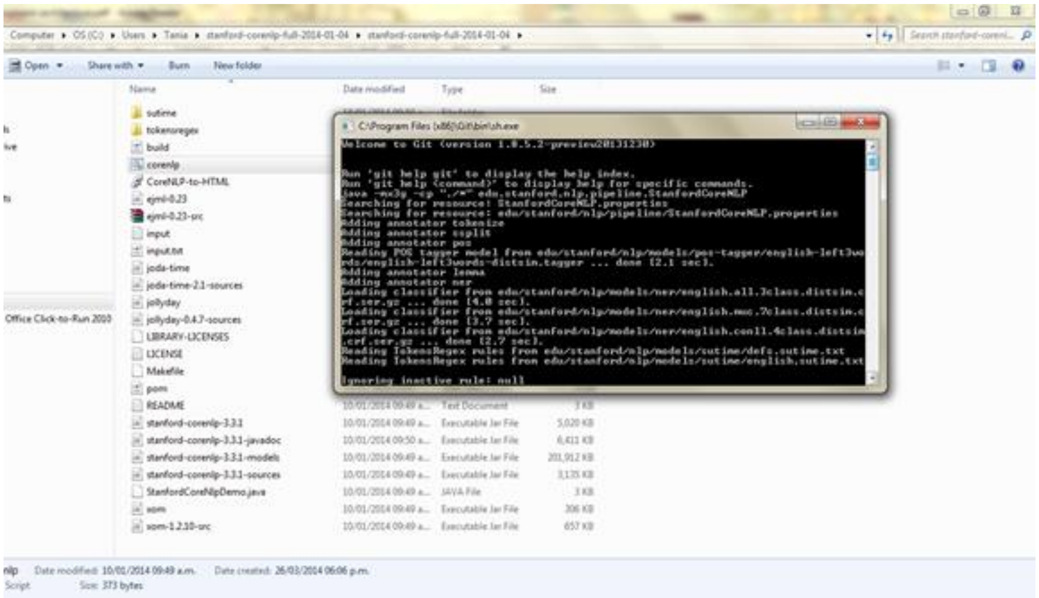
```
<?xml version="1.0" encoding="UTF-8"?><analysisEngineDeploymentDescription xmlns="http://uima.apache.org/resourceSpecifier">
  <name>hw2-137175-aae-deploy</name>
  <description/>
  <version>1.0</version>
  <vendor/>
  <deployment protocol="jms" provider="activemq">
    <casPool numberOfCASes="1" initialFsHeapSize="2000000"/>
    <service>
      <inputQueue endpoint="myQueueName" brokerURL="${defaultBrokerURL}" prefetch="0"/>
      <topDescriptor/>
      <analysisEngine async="false">
        <scaleout numberOfInstances="1"/>
        <asyncPrimitiveErrorConfiguration>
          <processCasErrors thresholdCount="0" thresholdWindow="0" thresholdAction="terminate"/>
          <collectionProcessCompleteErrors timeout="0" additionalErrorAction="terminate"/>
        </asyncPrimitiveErrorConfiguration>
      </analysisEngine>
    </service>
  </deployment>
</analysisEngineDeploymentDescription>
```

This one is the StanfordCoreNLPAnnotator, (http://nlp.stanford.edu/software/corenlp.shtml)



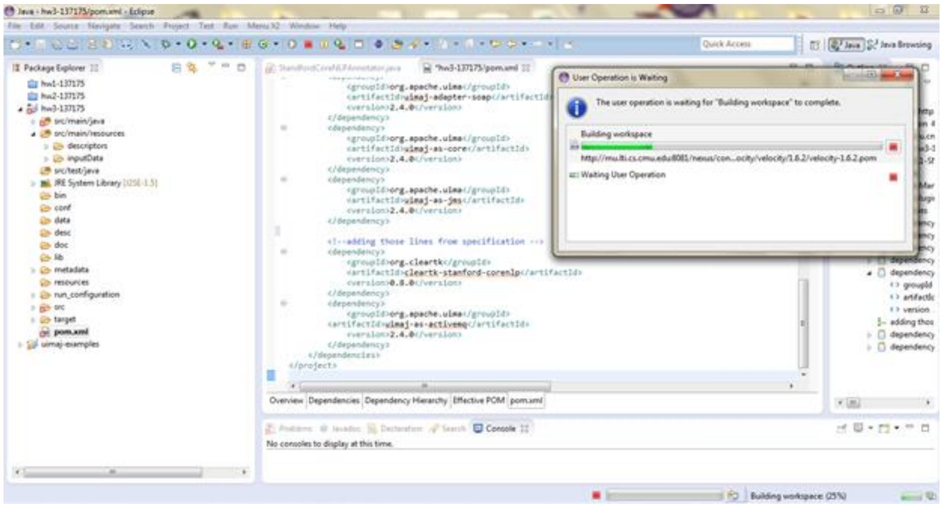
```
package mx.itam.hw3;

 * Copyright (c) 2011, Regents of the University of Colorado

import java.util.ArrayList;


/**
 *
 * <br>
 * Copyright (c) 2011, Regents of the University of Colorado <br>
 * All rights reserved.
 *
 * @author Steven Bethard
 */

public class StanfordCoreNLPAnnotator extends JCasAnnotator_ImplBase {

  public static AnalysisEngineDescription getDescription() throws ResourceInitializationException {
    return AnalysisEngineFactory.createPrimitiveDescription(StanfordCoreNLPAnnotator.class);
  }

  private StanfordCoreNLP processor;

  @Override
  public void initialize(UimaContext context) throws ResourceInitializationException {
    super.initialize(context);

    Properties properties = new Properties();
    properties.put("annotators", "tokenize, ssplit, pos, lemma, ner, parse, dcoref");

    this.processor = new StanfordCoreNLP(properties);
  }

  @Override
  public void process(JCas jCas) throws AnalysisEngineProcessException {
    Annotation document = this.processor.process(jCas.getDocumentText());
```

Testing and Running coreNLP:


Computer ▸ OS (C:) ▸ Users ▸ Tania ▸ stanford-corenlp-full-2014-01-04 ▸ stanford-corenlp-full-2014-01-04 ▸
Search stanford-coreni...
Open
Share with
Burn
New folder
Name
Date modified
Type
Size
sutime
tokensregex
build
corenlp
CoreNLP-to-HTML
ejml-0.23
ejml-0.23-src
input
input.txt
joda-time
joda-time-2.1-sources
jollyday
jollyday-0.4.7-sources
LIBRARY-LICENSES
LICENSE
Makefile
pom
README
stanford-corenlp-3.3.1
stanford-corenlp-3.3.1-javadoc
stanford-corenlp-3.3.1-models
stanford-corenlp-3.3.1-sources
StanfordCoreNlpDemo.java
xom
xom-1.2.10-src
10/01/2014 09:49 a... Text Document 3 KB
10/01/2014 09:49 a... Executable Jar File 5,020 KB
10/01/2014 09:50 a... Executable Jar File 6,411 KB
10/01/2014 09:49 a... Executable Jar File 201,912 KB
10/01/2014 09:49 a... Executable Jar File 3,135 KB
10/01/2014 09:49 a... JAVA File 3 KB
10/01/2014 09:49 a... Executable Jar File 306 KB
10/01/2014 09:49 a... Executable Jar File 657 KB
Office Click-to-Run 2010
nlp Date modified: 10/01/2014 09:49 a.m. Date created: 26/03/2014 06:06 p.m.
Script Size: 373 bytes
C:\Program Files (x86)\Git\bin\sh.exe

```
Welcome to Git (version 1.8.5.2-preview20131230)


Run 'git help git' to display the help index.
Run 'git help <command>' to display help for specific commands.
java -mx3g -cp "./*" edu.stanford.nlp.pipeline.StanfordCoreNLP
Searching for resource: StanfordCoreNLP.properties
Searching for resource: edu/stanford/nlp/pipeline/StanfordCoreNLP.properties
Adding annotator tokenize
Adding annotator ssplit
Adding annotator pos
Reading POS tagger model from edu/stanford/nlp/models/pos-tagger/english-left3wo
rds/english-left3words-distsim.tagger ... done [2.1 sec].
Adding annotator lemma
Adding annotator ner
Loading classifier from edu/stanford/nlp/models/ner/english.all.3class.distsim.c
rf.ser.gz ... done [4.0 sec].
Loading classifier from edu/stanford/nlp/models/ner/english.muc.7class.distsim.c
rf.ser.gz ... done [3.7 sec].
Loading classifier from edu/stanford/nlp/models/ner/english.conll.4class.distsim
.crf.ser.gz ... done [2.7 sec].
Reading TokensRegex rules from edu/stanford/nlp/models/sutime/defs.sutime.txt
Reading TokensRegex rules from edu/stanford/nlp/models/sutime/english.sutime.txt

Ignoring inactive rule: null
```

Adding those lines into pom.xml file:



```
        <groupId>org.apache.uima</groupId>
        <artifactId>uimaj-adapter-soap</artifactId>
        <version>2.4.0</version>
    </dependency>
    <dependency>
        <groupId>org.apache.uima</groupId>
        <artifactId>uimaj-as-core</artifactId>
        <version>2.4.0</version>
    </dependency>
    <dependency>
        <groupId>org.apache.uima</groupId>
        <artifactId>uimaj-as-jms</artifactId>
        <version>2.4.0</version>
    </dependency>

    <!--adding those lines from specification -->
    <dependency>
        <groupId>org.cleartk</groupId>
        <artifactId>cleartk-stanford-corenlp</artifactId>
        <version>0.8.0</version>
    </dependency>
    <dependency>
        <groupId>org.apache.uima</groupId>
    <artifactId>uimaj-as-activemq</artifactId>
        <version>2.4.0</version>
    </dependency>
  </dependencies>
</project>
```

User Operation is Waiting

The user operation is waiting for "Building workspace" to complete.

Building workspace

http://mu.lti.cs.cmu.edu:8081/nexus/con...ocity/velocity/1.6.2/velocity-1.6.2.pom

Waiting User Operation

No consoles to display at this time.

Building workspace: (25%)

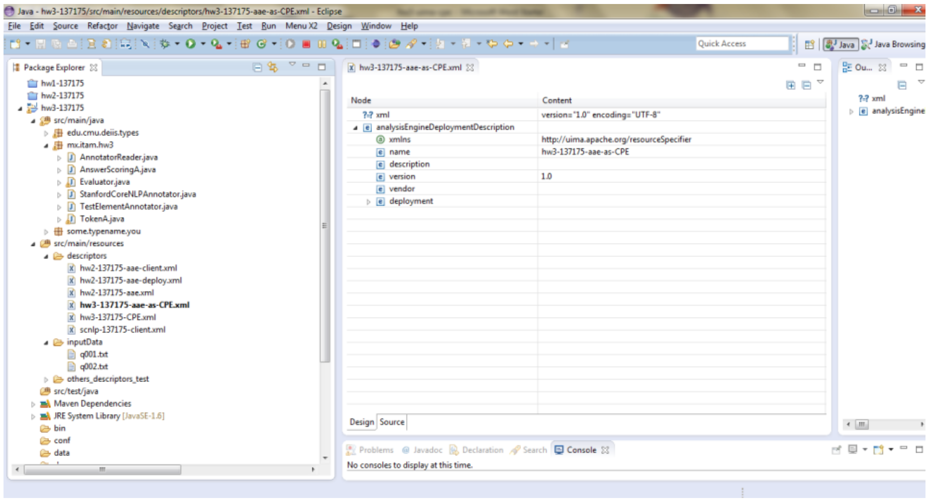
IMPORTING DEPENDENCES INTO POM.XML

```
<dependency>
      <groupId>org.apache.uima</groupId>
            <artifactId>uimaj-as-jms</artifactId>
                     <version>2.4.0</version>
                  </dependency>

      <!--adding those lines from specification -->
            <dependency>
                 <groupId>org.cleartk</groupId>
                       <artifactId>cleartk-stanford-corenlp</artifactId>
                         <version>0.8.0</version>
            </dependency>

          <dependency>
                     <groupId>org.apache.uima</groupId>
                         <artifactId>uimaj-as-activemq</artifactId>
                            <version>2.4.0</version>
            </dependency>
         </dependencies>
</project>
```

Exploring the tool ClearTK and checking the TypeSystem.xml reference that is here: https://code.google.com/p/cleartk/source/browse/cleartk-typesystem/src/main/resources/org/cleartk/TypeSystem.xml

Then the file $runRemoteAsyncAE throws some messages. Also the installation about ClearTK is in progress.

Right now the project about the hw3-137175 UIMA and UIMA-AS has the next structure and organization:


Java - hw3-137175/src/main/resources/descriptors/hw3-137175-aae-as-CPE.xml - Eclipse
File Edit Source Refactor Navigate Search Project Test Run Menu X2 Design Window Help
Quick Access
Java
Java Browsing
Package Explorer
hw3-137175-aae-as-CPE.xml
Ou...
Design
Source
Problems
Javadoc
Declaration
Search
Console

```
hw1-137175
hw2-137175
hw3-137175
  src/main/java
    edu.cmu.deiis.types
    mx.itam.hw3
      AnnotatorReader.java
      AnswerScoringA.java
      Evaluator.java
      StanfordCoreNLPAnnotator.java
      TestElementAnnotator.java
      TokenA.java
    some.typename.you
  src/main/resources
    descriptors
      hw2-137175-aae-client.xml
      hw2-137175-aae-deploy.xml
      hw2-137175-aae.xml
      hw3-137175-aae-as-CPE.xml
      hw3-137175-CPE.xml
      scnlp-137175-client.xml
    inputData
      q001.txt
      q002.txt
    others_descriptors_test
  src/test/java
  Maven Dependencies
  JRE System Library [JavaSE-1.6]
  bin
  conf
  data
```

Node	Content
?-? xml	version="1.0" encoding="UTF-8"
analysisEngineDeploymentDescription	
xmlns	http://uima.apache.org/resourceSpecifier
name	hw3-137175-aae-as-CPE
description	
version	1.0
vendor	
deployment	

```
?-? xml
analysisEngine
```

```
No consoles to display at this time.
```

Note: now I am in the integration the Name Entity annotations from *StanfordCoreNLP.java* into the answer scoring component but it is not running yet.