

# Online Legal Case Annotation

Adam Wyner (University of Liverpool)

Wim Peters (University of Sheffield)

December 13, 2010

Copyright © 2010 Adam Wyner and Wim Peters

# Introduction

- Argue a current undecided case with respect to precedents.
- Cases analysed in terms of *factors*, which are *prototypical fact patterns*. The factors support the decision.
- Compare and contrast the cases in terms of the factors; where the same factors hold, the same decision should be applied; where other factors hold, reason by a counterbalancing of factors.
- Identifying factors on basis of facts is a difficult, skilled, time-consuming, error-prone manual task.
- Want to develop tools to assist in this. Need basic information -- *what is a factor and how do we know it?*

# Introduction

- Use an online legal case annotation tool to:
  - gather information about what users consider to be a given factor.
  - annotate cases with respect to legally relevant information so as to support *semantic web* applications and *information extraction*.
  - provide ground materials for the development of finer-grained tools for factor analysis.
- *Crowd-sourcing legal informatics*.
  - useful for law school students learning case analysis.
  - useful for legal professionals in the analysis of cases.
  - legal informatics research.
- These slides are instructions on how to use the online tool.

# Introduction

- In this exercise, we are looking just for factors, not
  - the findings of the court
  - parties
  - the cause of action
  - the award
  - references to law
  - counter-claims
  - or other aspects (all of which could be dealt with separately).

# Introduction

- We advise
  - *reading through the slides all the way before starting the annotation exercise to familiarise yourself with the material and system.*
- Then
  - *start up the annotator and use the slides to remind yourself of the task.*

# Login

- login at:  
<https://teamware-demo.services.gate.ac.uk/cloud-tw/executive/login.jsp>
- You will be given a username and password to login. These are 'anonymous', and (at this point of the exercise) we are not collecting information about users.
- If one does not have a username and password, the instructions can be read as indicators of what to expect.
- You will have *annotator* rights, meaning that you'll be able to annotate the documents, but not have access to other functionalities.
- We will open the annotation editor to annotate documents.

# Login



GATE Teamware 1.3.1

Login

Login

**Username \***

**Password \***

Remember Me

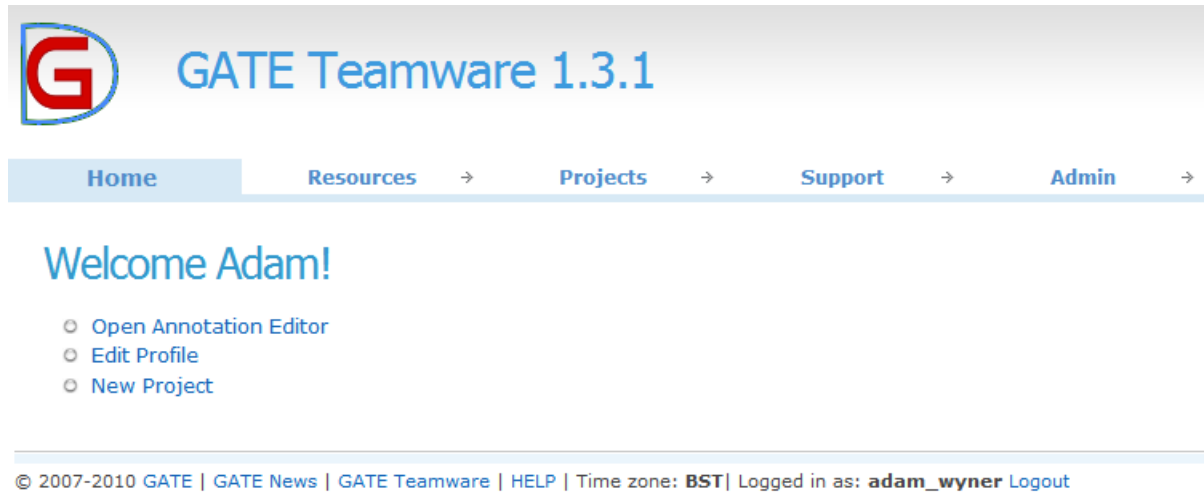
Login

Not a member? [Signup](#) for an account.

Forgot your password? Have your [password hint](#) e-mailed to you.

© 2007-2010 [GATE](#) | [GATE News](#) | [GATE Teamware](#) | [HELP](#) | Time zone: **BST**

# Welcome



**G** GATE Teamware 1.3.1

[Home](#) [Resources](#) → [Projects](#) → [Support](#) → [Admin](#) →

Welcome Adam!

- [Open Annotation Editor](#)
- [Edit Profile](#)
- [New Project](#)

© 2007-2010 [GATE](#) | [GATE News](#) | [GATE Teamware](#) | [HELP](#) | Time zone: **BST** | Logged in as: **adam\_wyner** [Logout](#)

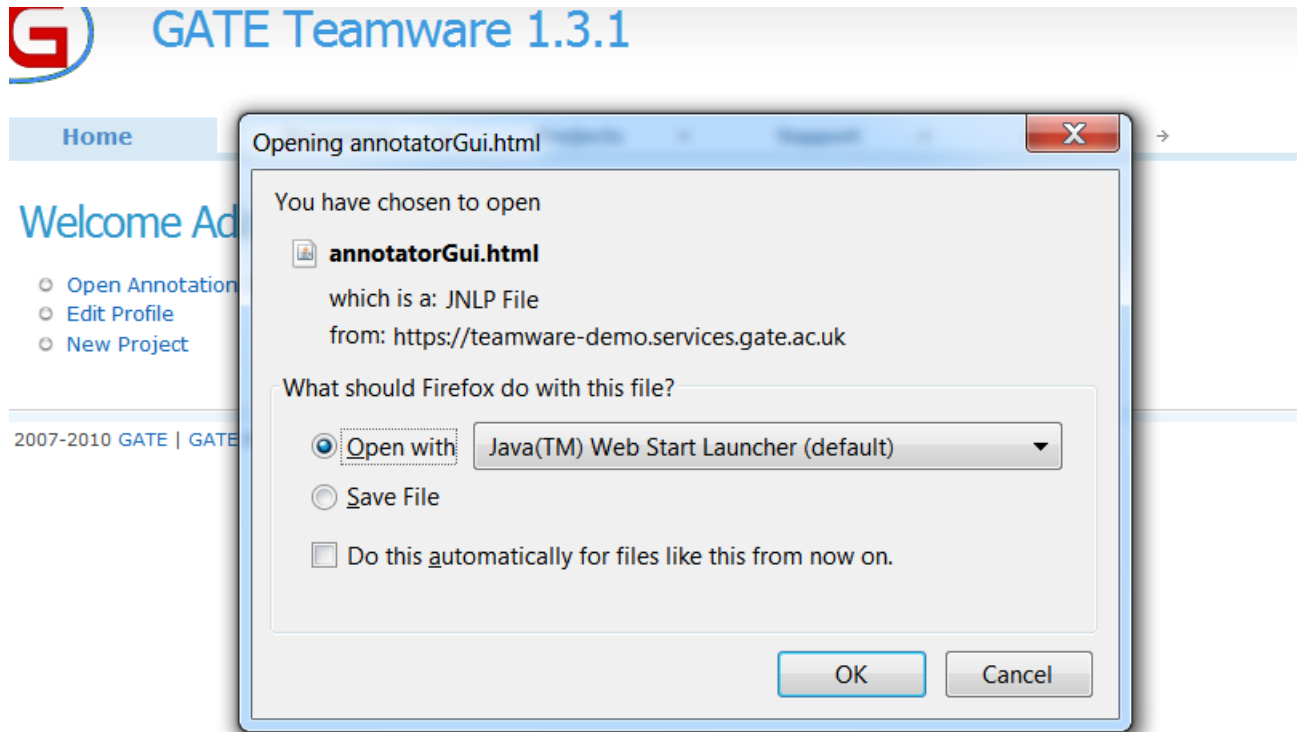
You can click on the menus (Resources, Projects, Support, Admin) for further information, but this is not necessary at the moment.



# User Guide and Annotator Movie

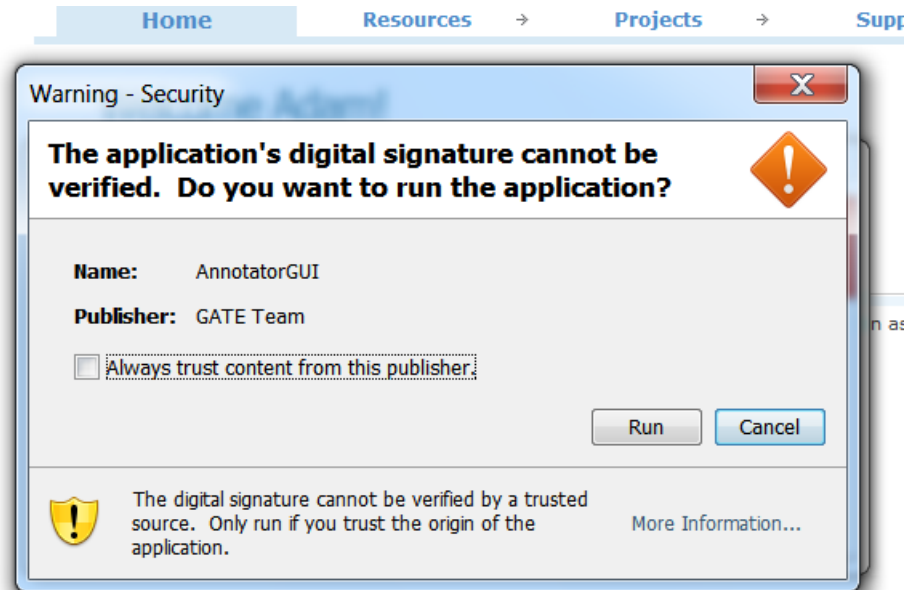
- Under Support, you'll find links to the User Guide and a movie for annotators. But, again, this is not necessary at the moment (and there might be a problem with the movie):
  - [User Guide](#)
  - [Movie \(for annotators\)](#)
- In these slides are steps of how to use the tool.
- In the Welcome screen (previous slide), click on the Open Annotator Editor element to get (next slide).

# Open Annotator Editor



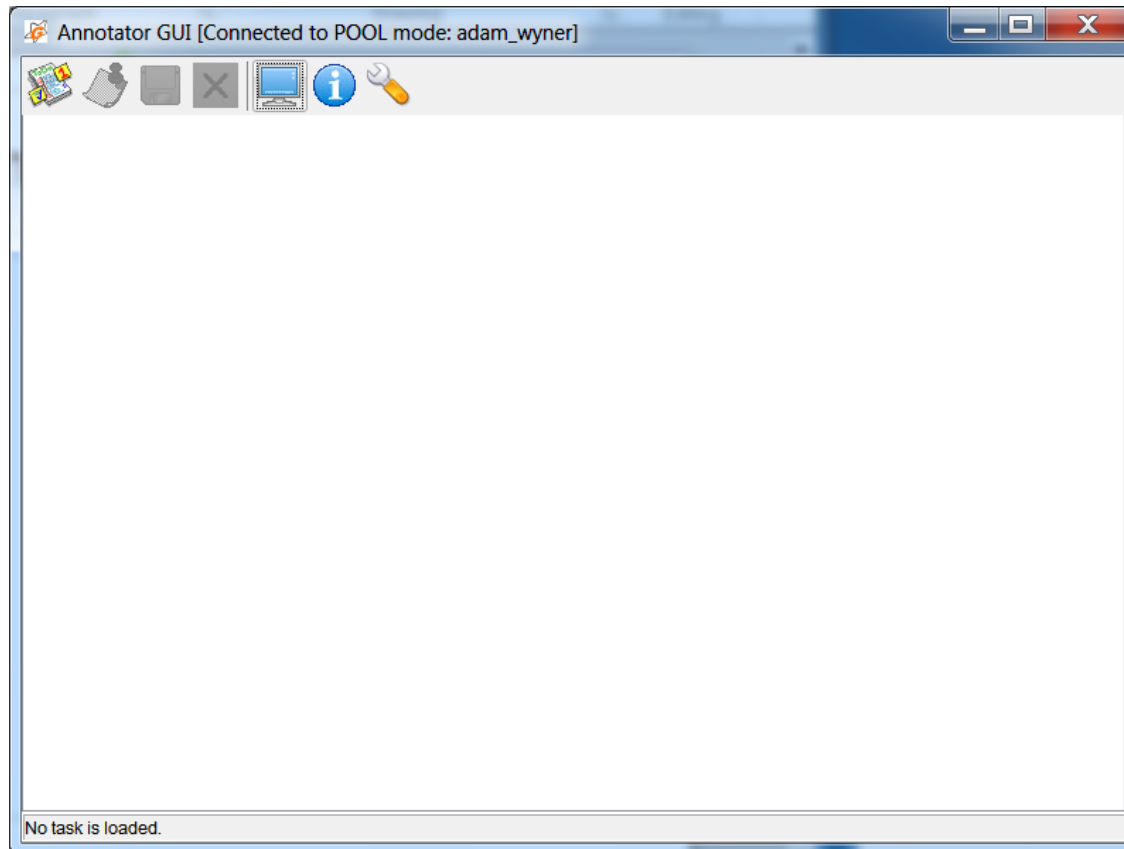
Click the button Open with Java, then OK, which starts the annotation application in Java to get (next slide).

# Accept the Application



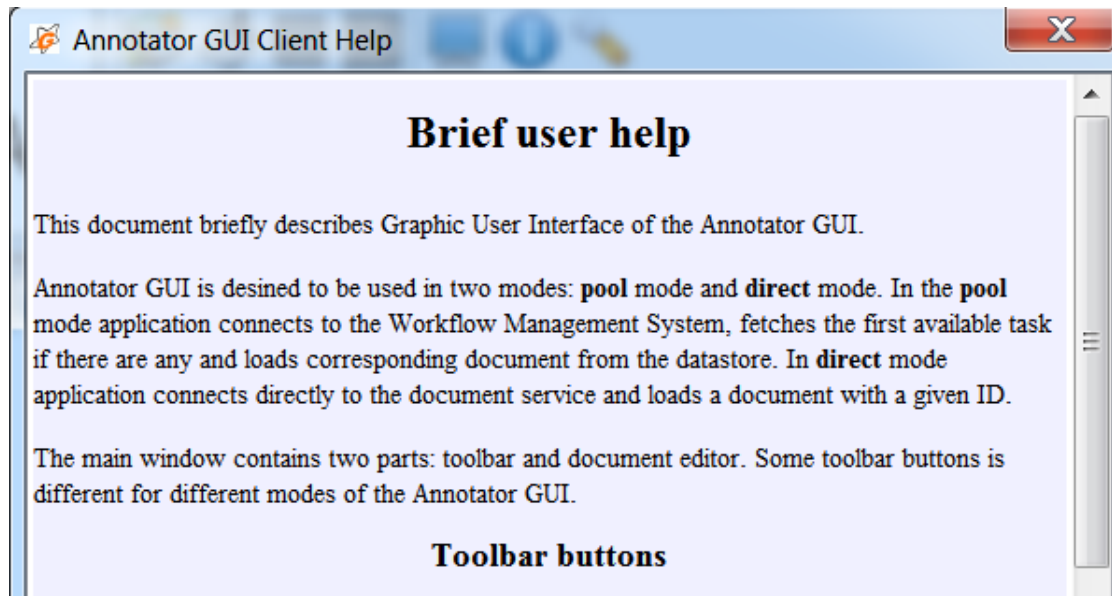
Just click on "Run", as you don't need to always trust content from this publisher. This allows the application to be run on your desktop. The annotator is then opened (next slide).

# Annotator GUI



Opens the annotator GUI with a 'blank' pool. Clicking on "i" gives information as in the next two slides.

# Help 1

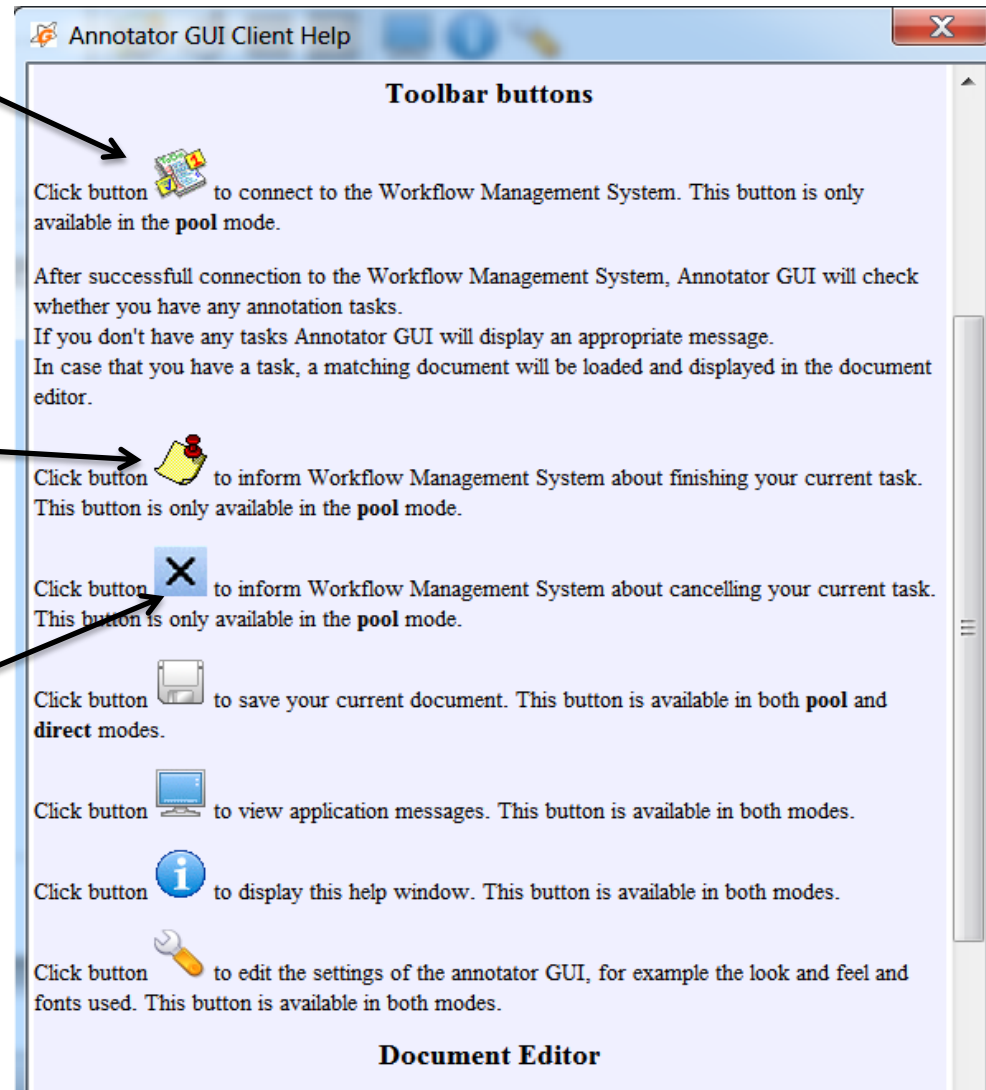


# Help 2

This will start the annotation task, giving you a document to annotate.

This will end your annotation for the current document.

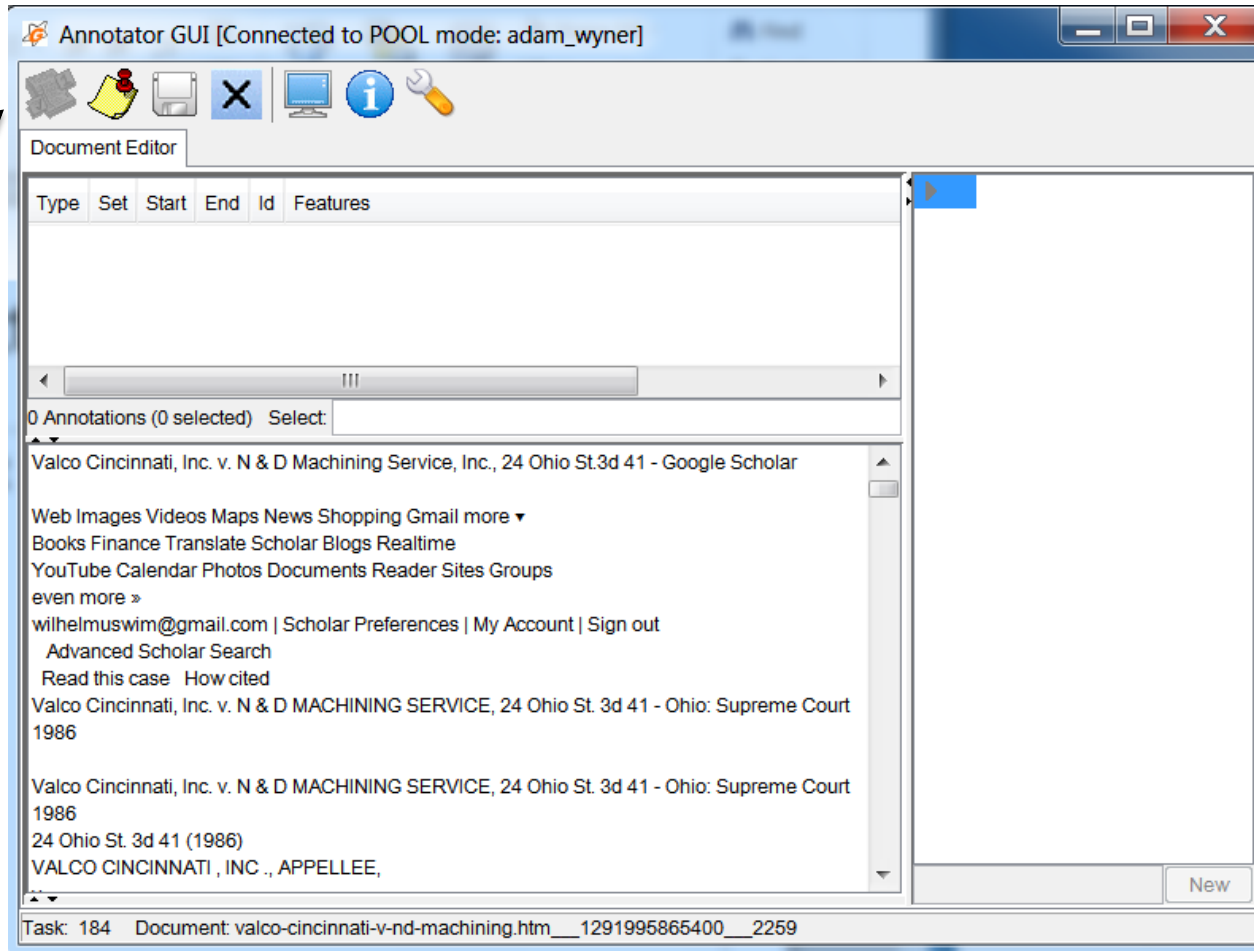
This will reject the current task; a new task may be offered.



Close the window when you are done here.

# Getting a Task

Clicking on the 'get a task button' delivers a text to annotate.



This is the case *Valco Cincinnati v. N & D Machining Service, Inc.*

# Rejecting a Task

- To reject a task and instead be offered a new task, use the X button.
- For this exercise, we are only looking for annotations for two cases - Valco-Cincinnati and Laser.
- The other two cases you might see, Boeing and Goldberg, can be skipped (or if you want to do them, go ahead as the more data we have the better).

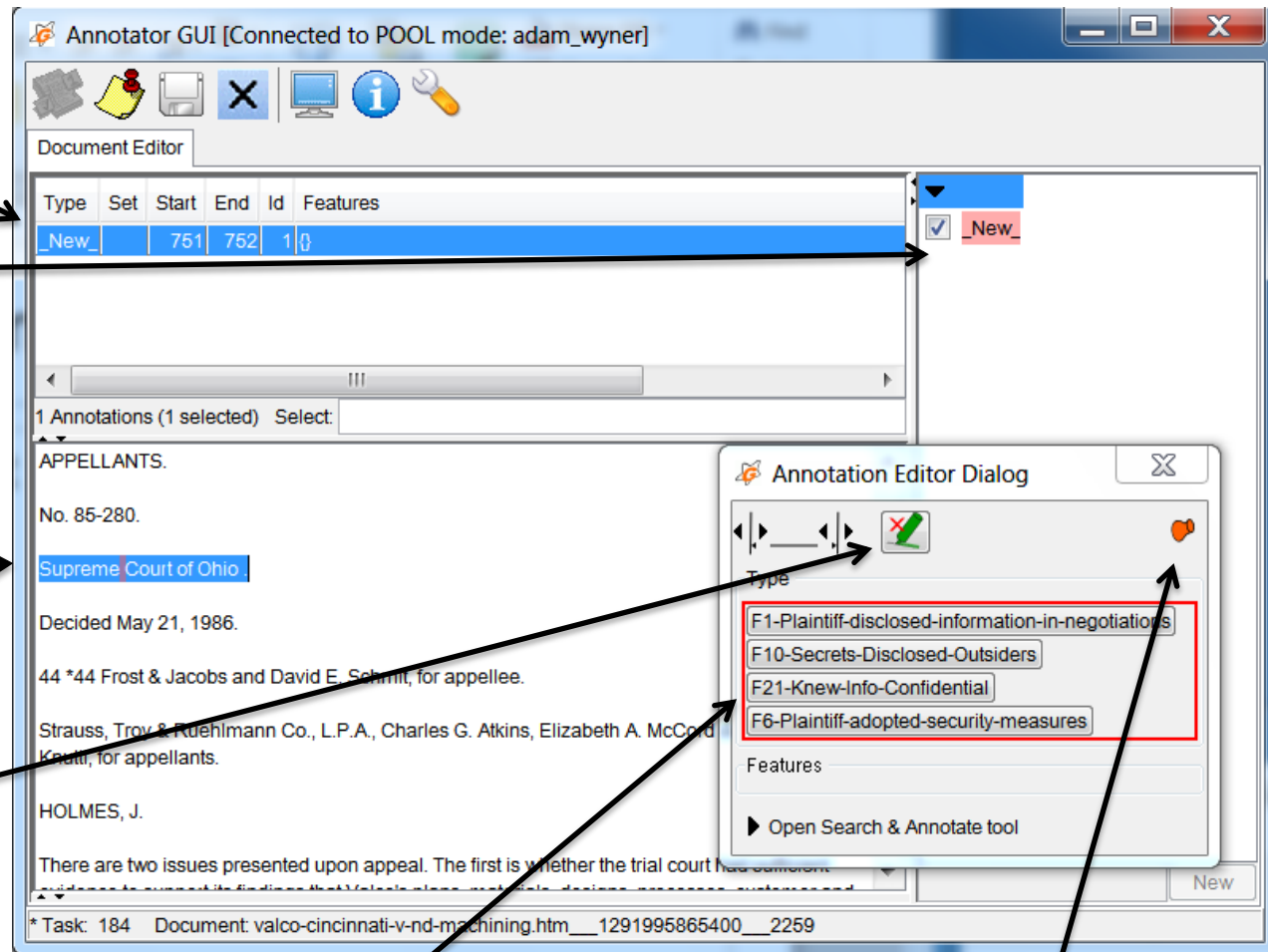


# Starting to Annotate 1

(3) We have information about the text span and the annotations used.

(1) To start to (mistakenly) annotate, highlight some text with the mouse.

(4) But, we made a mistake (don't want to bother about court). Delete annotation.



(2) The Annotation Editor Dialog box opens. These are the only four annotations we can make (more on the next slide). This box can be moved around or "pinned" to a location.

# Starting to Annotate 2

- In this exercise, we look at four "factors" about trade secrets. Briefly (more later):
  - Find passage in text.
  - Highlight.
  - Pick an annotation to annotate text.
- The factors (more in the next four slides):
  - F1-Plaintiff-disclosed-information-in-negotiations
  - F10-Secrets-Disclosed-Outsiders
  - F21-Knew-Info-Confidential
  - F6-Plaintiff-adopted-security-measures
- If you need a "cheat sheet" on the factors, print the next four slides out on one page.

# F1-Plaintiff-disclosed-information-in-negotiations

- Favours Defendant
- Plaintiff disclosed information during negotiations with defendant.
- Indicates that the defendant fairly obtained the information and the plaintiff was not interested to maintain the information as a secret.
- Applies where the plaintiff disclosed the information to defendant during negotiations for a joint venture, licensing agreement, sale of a business, etc.

# F6-Plaintiff-adopted-security-measures

- Favours Plaintiff
- The plaintiff adopted security measures
- Indicates that the plaintiff took efforts to maintain the secrecy of its information.
- Applies where the plaintiff actively tried to limit access to and distribution of its information by nondisclosure agreements, notification of employees and partners that the information was confidential, keeping information locked away or out of public sight, indicating documents were confidential, instituting plant security, using computer passwords, etc.

# F10-Plaintiff-disclosed-information-to-outside

- Favours Defendant
- The plaintiff disclosed information to outsiders.
- Indicates that the plaintiff was not interested to maintain the secrecy of the information.
- Applies where the plaintiff disclosed the information to outsiders. Does not apply where the plaintiff made the information publicly available in a publication or presentation.

# F21-Defendant-knew-information-confidential

- Favours Plaintiff
- The defendant knew the plaintiff's information was confidential.
- Indicates that the defendant knew that using or disclosing the information would breach confidentiality.
- Applies where the defendant knew the plaintiff's information was confidential. Does not apply where the contents of the nondisclosure agreement were not specific.

# Starting to Annotate 3

1. Find a passage in the text to annotate. A passage is a **whole sentence or group of contiguous sentences**.
2. Highlight the text and **hover** the pointer over the text.
3. The Annotation Editor Dialog opens (or is already open).
4. The highlighted text **must** be flashing to indicate that this will be the passage that is annotated. This happens by hovering the pointer over the text.
5. To annotate the highlighted passage, **double click** on the annotation Type.
6. The text is then (should be) annotated for that Type.
7. Back to (1.) and continue till there are no more passages to annotate. Further information in the next slides.
8. When done, click on the finish task icon.

# Starting to Annotate 4

Type	Set	Start	End	Id	Features
F6-Plaintiff-adopted-security-measures		2693	2917	3	

1 Annotations (1 selected) Select:

critical tolerances, dimensions, specifications and material requirements. The basic design, which played an integral role in the production of the world's first commercial jet transport, has undergone minor changes since its inception in the 1950's, each requiring FAA reauthorization.

Because these drawings are the result of Boeing's original \$ 16 million investment, and as they constitute Boeing's "lifblood" in the commercial airplane business, Boeing always considered them proprietary trade secrets. For protection of its trade secrets Boeing requires in a standard contract provision that Boeing's outside suppliers, who receive these drawings, agree not to use them for any purpose other than exclusive Boeing manufacture.

Prior FAA authorization is needed for every spare part sold or installed on any commercial aircraft. Outside suppliers may manufacture and sell airplane parts by either: (1) selling to a manufacturer with prior FAA design [\*42] authorization (like Boeing); or (2) selling directly to airlines after obtaining their own FAA authorization by (a) independent design and testing; (b) licensing from another authorized airplane manufacturer (like Boeing); or (c) showing that their own drawings and manufacturing [\*\*671] processes are identical to those previously authorized (identity). In granting an identity, the FAA does not consider where the applicant obtained its drawings or derived its manufacturing process.

The three major suppliers of aircraft windows in the United States are PPG Industries, Inc.; Swedlow, Inc.; and Sierracin. Sierracin had supplied Boeing with other products for many years. In 1982, it began manufacturing Boeing's 717 windows after acquiring the business of Libbey-Owens-Ford Company, which had previously

### Annotation Editor Dialog

Type

- F1-Plaintiff-disclosed-information-in-negotiations
- F10-Secrets-Disclosed-Outsiders
- F21-Knew-Info-Confidential
- F6-Plaintiff-adopted-security-measures**

Features

Case  Regexp  Whole  Highlights

The Boeing Co. ?

First Prev Next Annotate Ann. all next



# Continuing to Annotate 1

- Find another passage.
- Highlight. **Make sure the passage is flashing before selecting the annotation type.**
- Make sure to highlight the largest passage that indicates the factor; this may span a full sentence or several sentences.
- You can use the < or > elements in the Annotation Editor Dialog to change the highlight span a small amount.
- If you make a mistake, delete the annotation.
  - hover over the highlighted passage till it starts to flash, then use the delete annotation button in the Annotation Editor Dialog.
  - the highlighting over the passage should disappear.

# Continuing to Annotate 2

The screenshot displays an annotation tool interface. At the top, a table lists annotations:

Type	Set	Start	End	Id	Features
F6-Plaintiff-adopted-security-measures		2693	2917	3	{}
F21-Knew-Info-Confidential		4234	4679	6	{}

Below the table, a text document is shown with several paragraphs. The first paragraph is highlighted in dark green. The second paragraph is highlighted in light green. The third paragraph is highlighted in light green. The fourth paragraph is highlighted in light green. The fifth paragraph is highlighted in light green. The sixth paragraph is highlighted in light green. The seventh paragraph is highlighted in light green. The eighth paragraph is highlighted in light green. The ninth paragraph is highlighted in light green. The tenth paragraph is highlighted in light green. The eleventh paragraph is highlighted in light green. The twelfth paragraph is highlighted in light green. The thirteenth paragraph is highlighted in light green. The fourteenth paragraph is highlighted in light green. The fifteenth paragraph is highlighted in light green. The sixteenth paragraph is highlighted in light green. The seventeenth paragraph is highlighted in light green. The eighteenth paragraph is highlighted in light green. The nineteenth paragraph is highlighted in light green. The twentieth paragraph is highlighted in light green. The twenty-first paragraph is highlighted in light green. The twenty-second paragraph is highlighted in light green. The twenty-third paragraph is highlighted in light green. The twenty-fourth paragraph is highlighted in light green. The twenty-fifth paragraph is highlighted in light green. The twenty-sixth paragraph is highlighted in light green. The twenty-seventh paragraph is highlighted in light green. The twenty-eighth paragraph is highlighted in light green. The twenty-ninth paragraph is highlighted in light green. The thirtieth paragraph is highlighted in light green. The thirty-first paragraph is highlighted in light green. The thirty-second paragraph is highlighted in light green. The thirty-third paragraph is highlighted in light green. The thirty-fourth paragraph is highlighted in light green. The thirty-fifth paragraph is highlighted in light green. The thirty-sixth paragraph is highlighted in light green. The thirty-seventh paragraph is highlighted in light green. The thirty-eighth paragraph is highlighted in light green. The thirty-ninth paragraph is highlighted in light green. The fortieth paragraph is highlighted in light green. The forty-first paragraph is highlighted in light green. The forty-second paragraph is highlighted in light green. The forty-third paragraph is highlighted in light green. The forty-fourth paragraph is highlighted in light green. The forty-fifth paragraph is highlighted in light green. The forty-sixth paragraph is highlighted in light green. The forty-seventh paragraph is highlighted in light green. The forty-eighth paragraph is highlighted in light green. The forty-ninth paragraph is highlighted in light green. The fiftieth paragraph is highlighted in light green. The fifty-first paragraph is highlighted in light green. The fifty-second paragraph is highlighted in light green. The fifty-third paragraph is highlighted in light green. The fifty-fourth paragraph is highlighted in light green. The fifty-fifth paragraph is highlighted in light green. The fifty-sixth paragraph is highlighted in light green. The fifty-seventh paragraph is highlighted in light green. The fifty-eighth paragraph is highlighted in light green. The fifty-ninth paragraph is highlighted in light green. The sixtieth paragraph is highlighted in light green. The sixty-first paragraph is highlighted in light green. The sixty-second paragraph is highlighted in light green. The sixty-third paragraph is highlighted in light green. The sixty-fourth paragraph is highlighted in light green. The sixty-fifth paragraph is highlighted in light green. The sixty-sixth paragraph is highlighted in light green. The sixty-seventh paragraph is highlighted in light green. The sixty-eighth paragraph is highlighted in light green. The sixty-ninth paragraph is highlighted in light green. The seventieth paragraph is highlighted in light green. The seventy-first paragraph is highlighted in light green. The seventy-second paragraph is highlighted in light green. The seventy-third paragraph is highlighted in light green. The seventy-fourth paragraph is highlighted in light green. The seventy-fifth paragraph is highlighted in light green. The seventy-sixth paragraph is highlighted in light green. The seventy-seventh paragraph is highlighted in light green. The seventy-eighth paragraph is highlighted in light green. The seventy-ninth paragraph is highlighted in light green. The eightieth paragraph is highlighted in light green. The eighty-first paragraph is highlighted in light green. The eighty-second paragraph is highlighted in light green. The eighty-third paragraph is highlighted in light green. The eighty-fourth paragraph is highlighted in light green. The eighty-fifth paragraph is highlighted in light green. The eighty-sixth paragraph is highlighted in light green. The eighty-seventh paragraph is highlighted in light green. The eighty-eighth paragraph is highlighted in light green. The eighty-ninth paragraph is highlighted in light green. The ninetieth paragraph is highlighted in light green. The ninety-first paragraph is highlighted in light green. The ninety-second paragraph is highlighted in light green. The ninety-third paragraph is highlighted in light green. The ninety-fourth paragraph is highlighted in light green. The ninety-fifth paragraph is highlighted in light green. The ninety-sixth paragraph is highlighted in light green. The ninety-seventh paragraph is highlighted in light green. The ninety-eighth paragraph is highlighted in light green. The ninety-ninth paragraph is highlighted in light green. The hundredth paragraph is highlighted in light green.

An Annotation Editor Dialog box is open, showing a list of features: F1-Plaintiff-disclosed-information-in-negotiations, F10-Secrets-Disclosed-Outsiders, F21-Knew-Info-Confidential (selected), and F6-Plaintiff-adopted-security-measures. The dialog also includes a search field with the text "The Boeing Co." and buttons for "First", "Prev.", "Next", "Annotate", and "Ann. all next".

This dark green stuff should be yellow (as it is in the actual annotator).

# Continuing to Annotate 3

- When you are done annotating the document, close with the **Finish Task** button.
- If you want another task, use the **Get New Task** button.
- Again, for this exercise, we are only looking for annotations for two cases, Valco-Cincinnati and Laser. The other two cases, Boeing and Goldberg, can be skipped.

# What Then?

- We take the annotations from several annotators, comparing and contrasting them.
- We would like to gather user information on how hard/easy/unclear is it to identify the factors in a case. If you have comments about this, please email them to us.
- Other problems, issues, suggestions, advice?