Worksheets are Dynamic, Interactive Webpages

Educational Exercises

Simulations

Programsheets

Tax Forms

Expense Reports
Demo: Worksheet

Academic Program Sheet

Checking compliance w.r.t academic program (UG / MS) requirements in the CS Department at Stanford
Creating Worksheets

MySQL
PHP
JavaScript
CSS
HTML

The Big 5
Do you master them all?
Worksheets.Stanford.EDU

The DIY Approach

Set up Worksheets in WYSIWYG fashion using Logical Rules
No traditional programming required

Cloud Based
No need to install hardware or software

Easy to Manage
Through Dashboards and drop down lists
Demo: Worksheets Platform
Worksheet Mechanics

Step 1: User Interaction with UI adds or deletes facts

Step 2: Changes are computed using rules

Step 3: Consequences of changes reflected in UI
From UI to Facts

Demo: How UI Interactions add or remove Facts
From Facts to UI

Demo: How Facts change the UI
Rules: Connecting Facts and UI

Demo: Worksheets Platform
Rules: Connecting Facts and UI

Demo: More Rules
Dealing with Violations

Take exactly one of CS 157 or PHIL 161

What can be done?
1. Pinpoint the violation, and give some kind of visual feedback to the user

Inconsistency!

Take exactly one of CS 157 or PHIL 161
Dealing with Violations

Take exactly one of CS 157 or PHIL 161

What else can be done?
2. Repair the violation

In this case the repair is simple, i.e., to automatically select PHIL 161 and remove the selection CS 157
Repair: select PHIL 161 and remove the selection CS 157

Action:
Select PHIL 161

Remove holds(course, cs157)

Next State
holds(course, phil161)

Repairs captured using transition rules
Repair: select PHIL 161 and remove the selection CS 157

Action: Select PHIL 161

Current State
holds(course, cs157)

Remove holds(course, cs157)

Next State
holds(course, phil161)

holds(course, cs157) & select(phil161)  

==> ~holds(course, cs157)
Tutorials and Language Reference
Course Project

Step 1. Identify a legal application or use case within the application that may be modeled as a worksheet.

- self-contained i.e., focus on use-cases that do not rely on data from external sources
Course Project

Smart Questionnaires

Legal Advice Apps

Automatic Computation

Legal Expert Systems

Legal checklists
Worksheet Applications: Forms

- Determining Naturalization Eligibility (USCIS)
- FLSA Re-Classification Options Worksheet
Worksheet Applications: Export Control

- Export Controls Decision Tree
- Professional Systems
Worksheet Applications: Copyright Duration

First published without proper notice between January 1, 1978 and February 28, 1989, and not registered within five years of publication?

No

Yes

Work may be in the public domain (17 U.S.C. § 405(a)(2)).

First published before January 1, 1978?

No

Yes

Registered before January 1, 1978?

No

Yes

Published with proper notice?

No

Yes

No

Work entered the public domain when published without proper notice (17 U.S.C. §§ 9, 18 (1909 Act)).

First published or registered between January 1, 1964 and December 31, 1977?

Yes

No

Work made for hire, or anonymous or pseudonymous work?

Yes

No

First published or registered between January 1, 1923 and December 31, 1963?

Yes

No

Expires 70 years after author’s (for jointly authored works, last surviving author)’s death, but not before December 31, 2047 (17 U.S.C. §§ 302(a), 302(b), 303(a)).

If author (for jointly authored works, last surviving author) died before January 1, 1978, copyright will expire December 31, 2047.

If author (for jointly authored works, last surviving author) died before January 1, 1978, copyright will expire December 31, 2047.

Author (for jointly authored works, last surviving author) died before January 1, 1933?

No

Yes

Work created before January 1, 1837?

No

Yes

Copyright in works created between January 1, 1927 and December 31, 1927 will expire December 31, 2047.

Copyright in works created between January 1, 1927 and December 31, 1927 will expire December 31, 2047.

Copyright in works created between January 1, 1927 and December 31, 1927 will expire December 31, 2047.

Expires 95 years after first publication or registration (17 U.S.C. §§ 304(b), (b)).

Expires 120 years after creation (17 U.S.C. § 303(a)).
Worksheet Applications: Information Gathering

- Employee vs Independent Contractor
- Fair Use
# Worksheet Applications: Confusion

**Factors Considered by Circuit**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Circuit (Number in parentheses indicates the number of the factor in that circuit)</th>
<th>Total circuits considering the factor</th>
<th>Restatement Factors</th>
<th>Restatement (Third) Unfair Competition Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Similarity of the marks</td>
<td>(1) (2) (1) (2) (2) (2) (1) (2) (1) (1) (2) (2) (1)</td>
<td>13</td>
<td>§ 729(a)</td>
<td>§ 21(a)</td>
</tr>
<tr>
<td>2. Proximity of the goods</td>
<td>(2) (3) (9) (3) (3) (2) (2) (3) (3) (4)** (2) (3)</td>
<td>13</td>
<td>§ 731(b), 731(c)</td>
<td>§ 21(b)</td>
</tr>
<tr>
<td>4. Strength of plaintiff’s mark</td>
<td>(8) (1) (2) (1) (1) (1) (5) (1) (2) (6) (1) (1) (5)</td>
<td>13</td>
<td>§ 729(b)</td>
<td>§ 22</td>
</tr>
<tr>
<td>5. Defendant’s intent</td>
<td>(7) (6) (5) (6) (6) (7) (7) (4) (6) (2) (6) (6)</td>
<td>12</td>
<td>§§ 729(b), 731(b)</td>
<td>§ 21(c)</td>
</tr>
<tr>
<td>6. Sophistication of the consumers</td>
<td>(5) (8) (3) -- -- (6) (4) (6) (5) (5) -- (8)</td>
<td>10</td>
<td>§§ 729(c), 731(c)</td>
<td>§ 21(b)</td>
</tr>
<tr>
<td>7. Similarity of advertising methods, marketing methods</td>
<td>(4) -- (7) (5) (5) (3) (3)* -- (4) (4)** (5) -- --</td>
<td>9</td>
<td>§ 731(b)</td>
<td>§ 21(e)</td>
</tr>
<tr>
<td>8. Similarity of sales facilities</td>
<td>(3) -- -- (4) (4) -- (3)* -- -- (4) -- (3)</td>
<td>6</td>
<td>§ 731(b)</td>
<td>§ 21(e)</td>
</tr>
<tr>
<td>9. Likelihood of bridging the gap</td>
<td>-- (4) (10) -- -- (8) -- -- (8) -- -- (4) --</td>
<td>5</td>
<td>§ 731(b)</td>
<td>§ 21(e)</td>
</tr>
<tr>
<td>10. Comparative quality of the goods</td>
<td>-- (7) -- -- -- -- -- -- (7) --</td>
<td>2</td>
<td>§ 731(b)</td>
<td>§ 23(c)</td>
</tr>
<tr>
<td>11. Length of time of concurrent use without evidence of actual confusion</td>
<td>-- -- (4) -- -- -- -- -- -- -- -- (8)</td>
<td>2</td>
<td>§ 731(b)</td>
<td>§ 23(c)</td>
</tr>
<tr>
<td>12. Extent to which targets of parties’ sales efforts are the same</td>
<td>-- -- (8) -- -- -- -- -- -- -- -- --</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>13. Third-party uses of plaintiff’s mark</td>
<td>-- -- -- -- -- -- -- -- -- -- -- -- --</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>14. Variety of goods on which mark is used</td>
<td>-- -- -- -- -- -- -- -- -- -- -- --</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>15. Market interface between applicant and owner of prior mark</td>
<td>-- -- -- -- -- -- -- -- -- -- -- -- (10)</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>16. Extent of applicant’s right to exclude</td>
<td>-- -- -- -- -- -- -- -- -- -- -- -- (11)</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>17. Extent of potential confusion, i.e., whether de minimis or substantial</td>
<td>-- -- -- -- -- -- -- -- -- -- -- -- (12)</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>18. Any other established fact probative of effect of use</td>
<td>-- -- -- -- -- -- -- -- -- -- -- -- (13)</td>
<td>1</td>
<td>§ 731(c)</td>
<td>--</td>
</tr>
<tr>
<td>19. Strength of plaintiff’s mark in defendant’s geographically-distinct market</td>
<td>-- -- -- -- -- -- -- -- -- -- -- --</td>
<td>--</td>
<td>§ 21(f)</td>
<td>--</td>
</tr>
</tbody>
</table>

* The Seventh Circuit tends to consider both the similarity of advertising methods and the similarity of sales facilities under factor three. ** The Tenth Circuit considers in factor four the “similarity of products and manner of marketing.”

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## Worksheet Applications: Distinctiveness

<table>
<thead>
<tr>
<th>Type of Mark</th>
<th>Distinctiveness</th>
<th>Foreign Equivalents</th>
<th>Personal Names</th>
<th>Geographic Marks</th>
<th>Laudatory Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fanciful</td>
<td>Exxon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrary</td>
<td>Apple Computers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggestive</td>
<td>Coppertone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>“5-hour energy”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Descriptive</td>
<td>Joe’s Crab Shak</td>
<td></td>
<td>Secondary Meaning (American Airlines)</td>
<td>No Secondary Meaning (The Internet Profitability Company)</td>
<td></td>
</tr>
<tr>
<td>Generic</td>
<td>Computer</td>
<td></td>
<td></td>
<td></td>
<td>Never Distinctive or Protected</td>
</tr>
</tbody>
</table>

*Inherently Distinctive/Protected*
Worksheet Applications: Distinctiveness

• Filing of Small Business Taxes - Form 941

• Application for Disability Compensation Benefits - VA Form 21-526EZ
Course Project

Step 2. Build the Worksheet

You can use the Worksheets Editor or build your UI and Rules separately your preferred tools

1. **Sign in** > Click **Tutorial** > **Walkthroughs and References**
   - Worksheet Templates (available in editor)
   - Walkthroughs: Decision Trees, Dynamic Visualizations.
   - Language Reference

2. **Abhijeet.** abhijeet@stanford.edu
   - Gates Building Room 226
Course Project

Step 3. Submit

- link to Worksheet
- instructions on use
- peer and / or other user studies
- how your worksheet makes life easier for its users e.g. automatic compliance checking, complex calculations, explaining its results etc.
Suggested Strategy

1. Build in your legal application’s UI.

2. Design simple styling rules for your application.
   e.g. present warnings (say in red) in response to “bad” or non-compliant user inputs.

3. Design the semantic rules to capture the underlying laws, and regulations of your application

4. Build in transition rules, e.g.
   - to repair non-compliant inputs,
   - to guide users towards compliance
Resources

Worksheets Platform:
http://worksheets.stanford.edu

Language Reference:
http://worksheets.stanford.edu/documentation/reference.php

Regarding Project Ideas:
- Contact Alex
- Project Ideas and Resources on class web-site
  http://complaw.stanford.edu/stanford/lessons.html

Building Worksheets / Using Worksheets Editor:
- Templates available in editor
- Abhijeet, abhijeet@stanford.edu, Gates 226