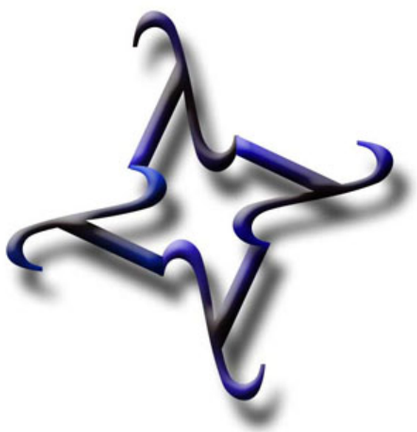
DIGITAL DEPARTMENT



Stanford Logic Group

Computational Logic in Enterprise Management

Towards the **Fully DECLARATIVE Enterprise**

- **Rules / Forms** based Approach to Software Development

- Help non-programmers specify **Enterprise Policies**

- Help skilled business users **Create** and **Manage** Enterprise Applications by themselves

- Encode Enterprise Policies **Declaratively** using Logic

Concept Car: **DIGITAL DEPARTMENT**

Web-based Enterprise Management

System for CS Department @ Stanford

Academic program administration using an **online** form / rule based-infrastructure.

- **room** and **event scheduling**
- **academic affairs** (course & program registrations)
- **financial management** (contracts and reimbursements)
- **personal** and **group** information management.

Room Scheduling

MSCS Program Management

Account Management

Space Czar

GATES INFORMATION NETWORK

Financials: Expense Reports

MSCS Program Sheets - Codifying MSCS Degree Requirements

Note: Enter "**Other Stanford Degree**" in the approval column for courses that you have applied to another Stanford degree. Enter "**Waiver On File**" for courses your advisor has waived via a foundation course waiver form.

Required:	**Equivalent elsewhere** (course number/title/institution)	**Approval**	**Grade**	**Units**
Logic, Automata, and Complexity (☑ CS 103)				3
Probability (☐ CS 109, ☐ STATS 116, ☐ CME 106, or ☐ MS&E 220)				
Algorithmic Analysis (☑ CS 161)				3
Computer Organization and Systems (☐ CS 107)				
Principles of Computer Systems (☐ CS 110)		Waiver on File		0

TOTAL UNITS USED TO SATISFY FOUNDATIONS REQUIREMENT: 6

Note: This total may not exceed 10 units.

SIGNIFICANT IMPLEMENTATION REQUIREMENT

At least one course in your MS program should be designated as satisfying the "Significant Implementation Requirement". Note that this course may also be used to satisfy some other requirement (i.e., Breadth, Depth, or Elective). This requirement ensures that you have taken part in some form of substantial software development as part of the MSCS program.

Course Number	**Title**	**Grade**

Courses that may be used to satisfy the significant implementation requirement include: CS 140, 143, 144, 145, 148, 210B, 221, 243, 248, and 346 (any deviations from this list must be approved by the Associate Chair for Education). Courses meeting the Significant Implementation Requirement must be taken at Stanford. Students who previously took at least two of these courses at Stanford as undergraduates may request a waiver of the requirement.

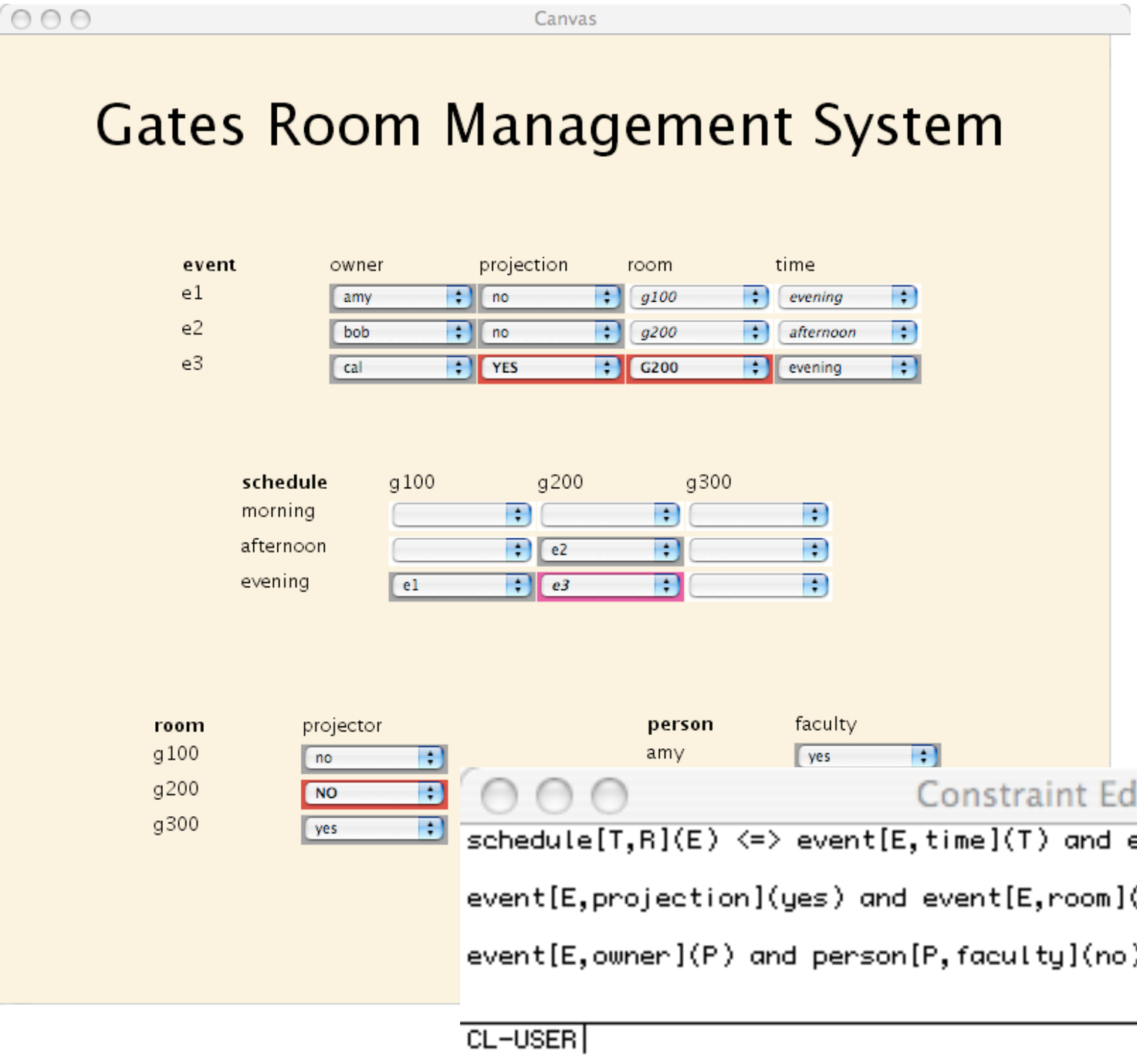
BREADTH REQUIREMENT

Choose 3 from the list below

☑ CS 140	☐ CS 143	☐ CS 144	☐ CS 145	☐ CS 147	☐ CS 148
☐ CS 149	☐ CS 154	☑ CS 155	☐ CS 157	☐ CS 164	☐ CS 240
			☐ CS 244	☐ CS 244B	☐ CS 244E

8 Requirements Left | Total Units: 12 | Status: Draft

Logical Spreadsheets



Correct-on-capture data entry:
"Start times must be before end times"

Enterprise Management Policy:
"Only faculty can reserve 3rd floor conference room"

DOM elements of a page

⇒ cells in **Websheet**

Cells are related by logical formulas

Capturing MSCS Program Requirements in **Websheets**

Probability (CS 109, STATS 116, CME 106, or MS&E 220)

A student may satisfy the probability 'foundations' requirement by taking either of cs109, stats 116, cme106 or mse220.

```
val(cs109, true) ⇒ prob(cs109)
val(stats116, true) ⇒ prob(stats116)
...
```

Probability (CS 109, STATS 116, CME 106, or MS&E 220)

A 1

By changing the color of a UI element we let students know that they have met the above requirement.

```
prob(cs109)... v prob(mse220) ⇒
color(prob_req, black)
```