

Assignment 4

The Importance of Representations in Design and Simon's "Sciences of the Artificial"

due: [Monday, Feb 2, 2002; 1:00pm](#) on the class website

1. Name the **two most important things/concepts** which you learned from the reading the chapter "The Architecture of Complexity"
 - 1.1. give a one paragraph explanation why you consider these concepts important
 - 1.2. are the concepts relevant to your work, to your interest, – if yes, why?

2) The Mutilated "8x8" Matrix

The Problem:

The next page shows you a mutilated "8x8" matrix (the two opposing corners cut out) and a domino block. One domino block covers *exactly* two fields of the "8x8" matrix.

Note: It is straightforward that one can use 32 domino blocks to cover a *complete* "8x8" matrix.

Question: Can one cover the mutilated "8x8" matrix with 31 domino blocks?

Remark: the major objective of this assignment is that you spend some effort trying to solve this problem and answering the questions below — it is not so important that you will succeed solving the problem!

Also: engage in some collaborative efforts solving it

Please do the following (please structure your answer accordingly — thanks):

1. try to find an answer to this problem! → **document briefly your thinking** — including all the important intermediate steps and failing attempts (i.e., create a "think-aloud protocol")
2. which resources did you use to solve the problem?
3. which process did you use?
4. which practice (of you or others) did you use?
5. could computers be useful to solve this problem?
6. what have you learned solving the problem: in general and for our course?
7. what have you learned not being able to solve the problem: in general and for our course?

