

ALLOY REVIEW

CURT CLIFTON

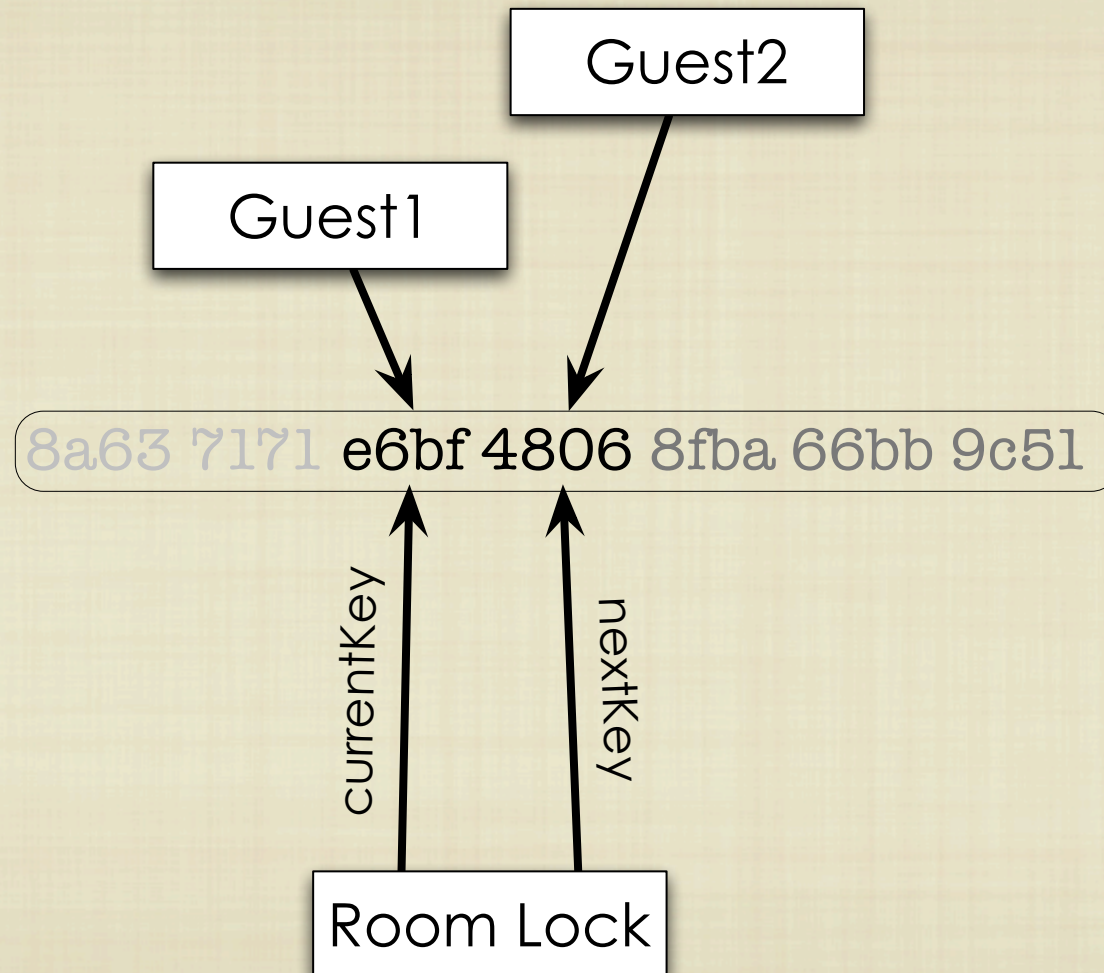
ROSE-HULMAN INSTITUTE OF TECHNOLOGY



PHOTO BY ARIEL.CHICO - [HTTP://FLIC.KR/P/7G80NN](http://flic.kr/p/7G80NN)

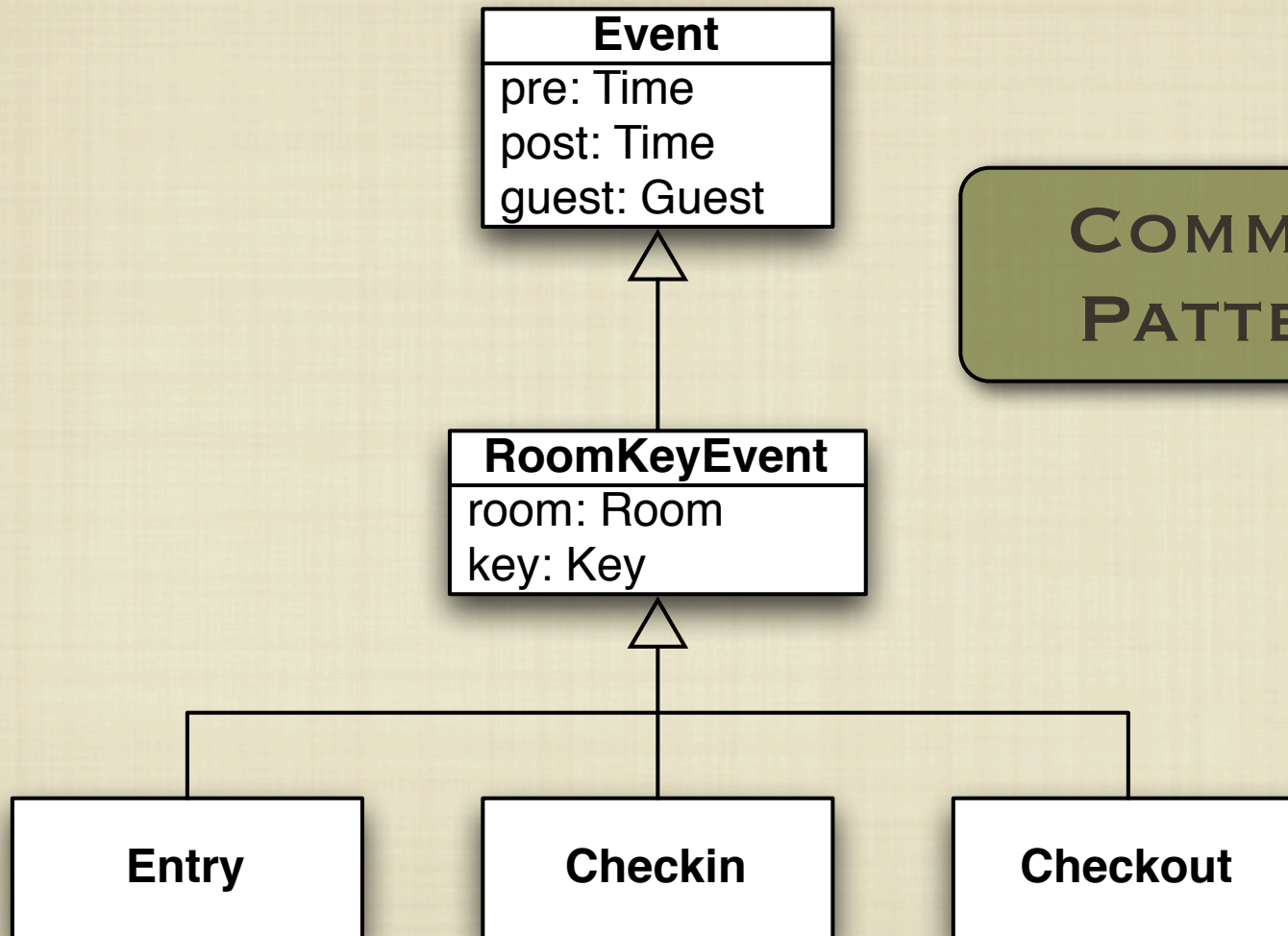
HOTEL ROOM LOCKS

HOW HOTEL LOCKS WORK



SEE FILE → OPEN SAMPLE MODELS...,
book/chapter6/hotel4.als

MODELING EVENTS



COMMAND
PATTERN!

EXAM

SAMPLE EXAMS POSTED

- **THURSDAY, IN CLASS**
- **OPEN BOOK, OPEN NOTES**
- **MAY USE LAPTOP:**
 - **BUT BUDGET TIME CAREFULLY!**
 - **ONLY LOCAL HD OR DIRECT LINKS FROM ANGEL OR COURSE WEB PAGE**

TOPICS

- **RELATIONS: SETS OF TUPLES**
- **OPERATORS**
 - univ, iden, none
 - **SET OPS:** +, &, -, in, =
 - **RELATIONAL OPS:** \rightarrow , DOT AND BOX JOIN, \sim , ++, ^, <: AND >:
- **CONSTRAINTS**
 - not, and, or, \Rightarrow
 - all, some, no, lone, one, let
- **FIELD AND RELATION DECLARATIONS, MULTIPLICITY**
- **SIG DECLARATIONS**
 - abstract, extends, one
- **TYPES**
- **FACTS, ASSERTIONS, PREDICATES, FUNCTIONS**
- **SCOPE**
- **MODELING IN ALLOY**

LIKELY PROBLEM TYPES

- SMALL PROBLEMS LIKE ON QUIZZES
- GIVE SIG DECLARATIONS FOR SOME SAMPLE DOMAIN
- GIVEN SOME ALLOY MODEL:
 - INTERPRET IT (LIKE HW5)
 - EXTEND IT (LIKE HW6)

FROM ALLOY
TO CODE

We can more quickly understand the tricky parts of a new problem by modeling it in Alloy before coding.

