CS 445
The Relational Model

Chapter 3

Sep 6, 2007
Relational Model

• Read Chapter 3

• The database is a collection of *relations*
  – each relation is a table

• Data Definition Language
  – subset of SQL

• Integrity constraints

• Views
Relation

• Relation schema
  - example:

• Relation instance
  - set of \{tuples|records|rows\}

• Relational database
  - Relational database schema
  - Relational database instance
Translation

• Translate E-R diagram to Relational Model
  – E-R Diagram to SQL!
  – must represent:
Create a relation

- SQL

- CREATE TABLE

- CONSTRAINT

- PRIMARY KEY

- ) Type=INNODB;

- INSERT INTO

- VALUES

- )

- ;
Unique

- CREATE TABLE

  CONSTRAINT UNIQUE ( )

);
Key References

- CREATE TABLE


  CONSTRAINT PRIMARY KEY
  ( ),

  CONSTRAINT FOREIGN KEY
  REFERENCES

  Type=INNODB;