

CSC 355 Database Systems

Lecture 16

Eric J. Schwabe

School of Computing, DePaul University

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Today:

- ◆ Trigger Examples

Oracle Trigger Syntax

```
CREATE [OR REPLACE] TRIGGER Name
BEFORE/AFTER
    INSERT OR DELETE OR UPDATE [OF Attribute] ON TABLE
[REFERENCING
    OLD AS OldName
    NEW AS NewName]
[FOR EACH ROW]
[WHEN (condition)]
DECLARE
    ...variable declarations...
BEGIN
    ...PL/SQL statements...
END;
/
```

Trigger Examples

- ◆ Salary Cap: [DONE]
 - Trigger cancels any operation that causes the company's total budget for salaries to exceed \$1,000,000 (statement-level)
- ◆ Departmental Budgets:
 - Trigger maintains current totals of the salaries of all employees in each department (row-level)

Trigger Examples

- ◆ Logging:
 - Keep a record of all operations performed on a table (add to Departmental Budgets example...)
- ◆ Insuring Referential Integrity:
 - If a record is being added that would violate referential integrity, add a row with the needed primary key to the other table first! (add to Departmental Budgets example...)



Next Time:



- ◆ Views