Unit 13 – Transactions & Concurrency

\*Transactions must be inside a stored procedure

\*Unit of Work: it all works or none of it does; all records are inserted into DB or none are

USE College;

DROP PROCEDURE IF EXISTS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ;

DELIMITER $$

USE College$$

CREATE PROCEDURE \_\_\_\_\_\_\_\_\_\_\_\_\_\_

BEGIN

//Declare any variables needed

DECLARE CONTINUE HANDLER FOR SQLEXCEPTION -- Handler

BEGIN -- Executes only if an exception occurs

SET errorOccurred = TRUE;

GET DIAGNOSTICS CONDITION = 1

ErrorMessage = Message\_TEXT;

END ;

START TRANSACTION;

//statements to be executed/ inserted

IF errorOccurred = TRUE THEN

**ROLLBACK;**  **-- All statements discarded, DB returned to original**

SELECT CONCAT('The student failed to add: ', errorMessage) AS Results;

ELSE

**COMMIT;** **-- All statements executed**

SELECT 'The student was successfully added.' AS Results;

END IF;

END

$$

DELIMITER ;

TRANSACTION ROLLBACK:

* Will not get an error in bottom window
* Insert statement aborted
* Error is handled by the handler
* Error message is displayed in the Results table from IF statement