Zac Taylor

http://zact.siteground.net/Shipping3PL/homepage.php

Changes

**SQL CODE:**

Trigger: Created a trivial trigger named paymentTrigger that automatically creates a new payment of $100 with a referenceNumber of 999 using the current date. The assumption is when the contract is signed the client must pay 100$ for paperwork fees etc. so this is always recorded automatically when a new contract is created.

**Discussion:**

Integrity Enforcement: Primary and Foreign Key Constraints help maintain the integrity of the database. My main enforcement methods were primary and foreign keys. Row integrity is enforced by Primary Keys in every table. Column integrity is enforced by ensuring each column adheres to the same format, datatype, length etc. This is enforced by choosing data types and limiting length or other characteristics to ensure integrity (EX: limiting state to two characters). Referential integrity is implemented by creating table relationships between tables using foreign keys.

Isolation Level: Set to default repeatable read. I chose to go with repeatable read because I wanted consistency when running SELECT statements. Repeatable Read ensures that reads are always consistent and is middle of the road in terms of performance. For having a limited amount of database users I felt this would be a solid choice. Serializable has a lower performance than repeatable read because of how it locks even plain reads. Serializable also only helps with phantom reads which can be worked around using other methods.

Article on isolation levels:

http://www.ovaistariq.net/597/understanding-innodb-transaction-isolation-levels/

**Forms:**

Inserts: All tables now have working inserts (To test inserts you can use 1 for clientID, manufacturerID, warehouseID, paymentID etc)

Deletes: All tables now have working deletes

Updates: Shipper, Client and Manufacturer tables now have working updates

Selects: All tables now have working selects