

## Object Oriented Software Development - CA3: Customer Invoice Management System

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Worth: 20%

Version: 0.6, Document subject to change, so check it regularly!

Due: 25/02/21

#### **Problem:**

You are required to develop a system to manage customers' purchases. The system should consist of at least the following:

- Backend database
  - Minimum 3 tables (e.g Customer, Invoice, Product)
  - Provide inner join over multiple tables
  - Any database or your choice (needs a Java database connector)
- Front end GUI

- Should provide CRUD (create, retrieve, update, delete) operations on the database
- Should demonstrate use of a variety of Swing components (Buttons, Textboxes, etc.)
- Provide Error Handling in your code (e.g can user put a 'string' into a field expecting an 'int', properly structured email address, etc.)
- Use your git repo to store the code for the project
- Zip the files (Screencast, Document, Database dump, Project API & Excutable jar file) and rename the zipped file (e.g. CA3-Student-Name.zip), then upload to Blackboard

#### **Deliverables:**

- 1. Screencast of project working
- 2. Documentation should include:
  - Description
  - Requirements
  - Screenshot database tables (Structure & Data)
  - ER Diagram
  - Interesting source code snippets (not a source code dump)
  - Tests
- 3. Source code
- 4. Database Dump
- 5. Project API
- 6. Exectuable jar file

### Marking Scheme:

- Database Operations (CRUD) through the GUI = 40%
  - -10% per operation
- Use of GUI Components = 30%
  - Use of at least 5 components = 10%
  - Remainder of marks for well-presented GUI = 20%
- Project Documentation = 20%
- Project Screencast = 10%