

**CAI-STA PURCHASE AND INVENTORY MANAGER**

TEST REPORT FOR ITERATION 1 USER STORIES

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| **Team Name** | **SystemScape** |
| **Section** | S19A |
| **Team Members** | Angeles, Antonio Mariano  Coquilla, Phillip Bryan  Cote, Christian Gabriel  Fernandez, Ryan Austin  Poblete, Clarisse Felicia  Quindoza, Rissa Marie Grace  Salceda, Francesco Juan  Tan, Shayane  Uy, Mervin Stewart  Velez, Gio Anton |
| **Date Submitted** |  |

**1.0 Introduction**

The software aims to provide CAI-STA with a system to manage the data involved in purchases and inventory.

“The specific objectives of the software are as follows:

* To provide a facility for managing inventory;
* To provide a facility for managing suppliers;
* To provide a facility for managing purchase orders;
* To provide a facility for keeping track of contracts and warranties;
* To provide a facility for keeping track of item and project assignments to employees;
* To notify the manager about any upcoming expiries of contracts and warranties;
* To generate inventory reports”

Iteration 1 user stories is mainly composed of features that show reports(e.g. inventory, warranty, etc.), features that adds data(e.g. purchase order, suppliers, etc.) to the client’s database, and features such as login that secures the system.

The tests are mostly black box testing but other tests were also performed. For instance, a usability testing was performed on User Story # 4, Test Case 4-5, and User Story 16, Test Case 16-19. A design review was performed on User Story 6, Test Case 6-9. The main purpose of conducting these tests was to ensure that the system is with as small amount of errors as possible. The tests were done with the intention of finding out as many errors as possible within a timespan of two hours and most test cases contains an input that might crash the system.

**2.0 Contribution Log**

**Validation Testing**

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| **Test Case ID – User Story** | **Writer** | **Tester** |
| 1 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 2 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 3 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 4 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 5 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 6 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 7 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 8 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 9 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 10 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 11 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 12 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 13 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 14 - Create Purchase Order | Clarisse Poblete | Clarisse Poblete |
| 1 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 2 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 3 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 4 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 5 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 6 - Record Supplier Details | Clarisse Poblete | Mervin Uy |
| 1 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 2 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 3 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 4 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 5 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 6 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 7 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 8 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 9 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 10 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 11 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 12 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 13 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 14 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 15 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 16 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 17 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 18 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 19 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 20 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 21 - Add Inventory Item | Clarisse Poblete | Clarisse Poblete |
| 1 - View Suppliers | Mervin Uy | Mervin Uy |
| 2 - View Suppliers | Mervin Uy | Mervin Uy |
| 3 - View Suppliers | Mervin Uy | Mervin Uy |
| 4 - View Suppliers | Mervin Uy | Mervin Uy |
| 1 - View Purchase Orders | Mervin Uy | Mervin Uy |
| 2 - View Purchase Orders | Mervin Uy | Mervin Uy |
| 3 - View Purchase Orders | Mervin Uy | Mervin Uy |
| 4 - View Purchase Orders | Mervin Uy | Mervin Uy |
| 5 - View Purchase Orders | Mervin Uy | Mervin Uy |
| 1 - View Inventory | Mervin Uy | Mervin Uy |
| 2 - View Inventory | Mervin Uy | Mervin Uy |
| 3 - View Inventory | Mervin Uy | Mervin Uy |
| 4 - View Inventory | Mervin Uy | Mervin Uy |
| 1 - Add Employee | Mervin Uy | Mervin Uy |
| 2 - Add Employee | Mervin Uy | Mervin Uy |
| 3 - Add Employee | Mervin Uy | Mervin Uy |
| 1 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 2 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 3 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 4 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 5 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 6 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 7 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 8 - Record Warranty Dates | Antonio Angeles | Antonio Angeles |
| 1 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 2 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 3 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 4 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 5 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 6 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 7 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 8 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 9 - Record Contract Dates | Antonio Angeles | Antonio Angeles |
| 1 - Login Users | Mervin Uy | Mervin Uy |
| 2 - Login Users | Mervin Uy | Mervin Uy |
| 3 - Login Users | Mervin Uy | Mervin Uy |
| 4 - Login Users | Mervin Uy | Mervin Uy |
| 5 - Login Users | Mervin Uy | Mervin Uy |
| 6 - Login Users | Mervin Uy | Mervin Uy |
| 7 - Login Users | Mervin Uy | Mervin Uy |
| 8 - Login Users | Mervin Uy | Mervin Uy |
| 1 - Notify Incoming Warranty Expirations | Antonio Angeles | Antonio Angeles |
| 2 - Notify Incoming Warranty Expirations | Antonio Angeles | Antonio Angeles |
| 1 - Notify Incoming Contract Expirations | Antonio Angeles | Antonio Angeles |
| 2 - Notify Incoming Contract Expirations | Antonio Angeles | Antonio Angeles |

**Verification Testing for Design**

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| **Design Artifact Reviewed** | **Reviewer** |
| Database: | |
| ER Diagram  ERD to Table Mapping | Antonio  Clarisse  Mervin |
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| User Interface: | |
| package view:  Button.java  CellEdit.java  Contact.java  Content.java  Extra.java  GUI.java  ImageLabel.java  Login.java  MainPanel.java  Message.java  NotifContract.java  Notification.java  NotifWarranty.java  Observer.java  PanelCell.java  PopUp.java  Subject.java  ViewSpecificTemplate.java  ViewTemplate.java  package view.employee:  AddEmployee.java  FilterEmployee.java  TabEmployee.java  ViewEmployee.java  package view.inventory:  AddInventoryContent.java  BasicAddItem.java  ExportInventory.java  FilterInventory.java  ItemPanelDecorator.java  ItemPanelParticipant.java  ItemPanelTemplate.java  ItemTileContract.java  ItemTileGeneral.java  ItemTileIT.java  ItemTileNonIT.java  ItemTileSoftware.java  ItemTileWarranty.java  PanelRegistration.java  PanelRegistry.java  TabInventory.java  ViewInventory.java  package view.purchaseOrder:  AddPO.java  AddPOItem.java  FilterPO.java  POTableModel.java  TabPO.java  ViewListPO.java  ViewPO.java  ViewPOItemTable.java  ViewSpecificPO.java  package view.supplier:  AddSupplier.java  FilterSupplier.java  TabSupplier.java  ViewContactsTable.java  ViewListSuppliers.java  ViewSpecificSupplier.java  ViewSupplier.java | Antonio  Clarisse  Mervin |
| Classes: | |
| package controller:  AssignmentController.java  ContractController.java  EmployeeController.java  InventoryItemController.java  InventoryItemInterface.java  ITAssetController.java  ItemDataInterface.java  Main.java  PurchaseOrderController.java  PurchaseOrderInterface.java  SupplierController.java  SupplierInterface.java  UserController.java  WarrantyController.java  package model:  Assignment.java  Contract.java  Employee.java  HardwareItem.java  InventoryItem.java  ITAsset.java  ItemData.java  PurchaseOrder.java  SoftwareItem.java  Supplier.java  SupplierContract.java  User.java  Warranty.java  package model.builder:  ContactFilterQueryBuilder.java  FileQueryBuilder.java  ItemInventoryFilterQueryBuilder.java  POFilterQueryBuilder.java  QueryFilterDirector.java  SupplierFilterQueryBuilder.java  package model.database:  AssignmentDAO.java  ContractDAO.java  DAO.java  DBConnection.java  EmployeeDAO.java  IDBCUD.java  IDBGet.java  InventoryItemDAO.java  ITAssetDAO.java  ItemDataDAO.java  PurchaseOrderDAO.java  SupplierContactDAO.java  SupplierDAO.java  UserDAO.java  WarrantyDAO.java | Antonio  Clarisse  Mervin |

**3.0 Software Summary**

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| **ID - User Story** | **Priority** | **Progress** |
| 6 - Create Purchase Order | HIGH - 10 | INCOMPLETE - No validation of user inputs but can save to the database |
| 4 - Record Supplier Details | HIGH - 10 | INCOMPLETE - No validation of user inputs but can save to the database and addres input is not properly implemented |
| 16 - Add items to inventory | HIGH - 10 | INCOMPLETE - Functionality still excludes the invoice. |
| 3 - View Suppliers | HIGH - 10 | INCOMPLETE - View is implemented but filter is not |
| 5 - View Purchase Orders | HIGH - 10 | INCOMPLETE - View is implemented but filter is not |
| 15 - View Inventory | HIGH - 10 | INCOMPLETE - View is implemented but filter is not |
| 13 - Add employees | HIGH - 10 | INCOMPLETE - Actual functionality is not present though the user interface is |
| 10 - Record Warranty Dates | HIGH - 10 | INCOMPLETE - Actual functionality is not present though the user interface is |
| 8 - Record Contract Dates | HIGH - 10 | INCOMPLETE - Actual functionality is not present though the user interface is |
| 1 - Login | HIGH - 20 | COMPLETE |
| 11 - Notify Incoming Warranty Expirations | HIGH - 20 | MISSING |
| 9 - Notify Incoming Contract Expirations | HIGH - 20 | MISSING |

**4.0 Test Cases with FAIL Result**

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| **User Story ID - Name** | **Problem Description** | **Severity** |
| 13 - Add Employee | It does not work. The status drop down menu does not show any value for the user to input so data cannot be added to the database. | Critical |
| 10 - Record Warranty Dates | The system does not add warranty expiry dates to the database. | Critical |
| 11 - Notify Incoming Warranty Expirations | The system does not display notification messages for incoming warranty expiry dates. | Critical |
| 9 - Notify Incoming Contract Expirations | The system does not display notification messages for incoming contract expiry dates. | Critical |
| 8 - Record Contract Dates | The system does not add contract expiry dates to the database. | Critical |
| 16 - Add Inventory Item | The system can only add items into the database if the invoice is not included. | Major |
| 3 - View Suppliers | The filter does not work. The input of criteria is fine but filtering does not occur.  Lack of error messages for:   * Empty lists * No match found (filter) | Major |
| 5 - View Purchase Orders | The filter does not work. The input of criteria is fine but filtering does not occur.  Lack of error messages for:   * Empty lists * No match found (filter) | Major |
| 15 - View Inventory | The filter does not work. The drop down menu for filtering criteria doesn’t contain any values.  Lack of error messages for:   * Empty lists * No match found (filter) | Major |
| 6 - Create Purchase Order | The system does not validate user inputs. | Minor |
| 4 - Record Supplier Details | The system does not validate user inputs. | Minor |
| 1 - Login |  | Trivial |

**5.0 Design and Code**

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| **Design Review** | | |
| **Sequence ID** | **Problem Description** | **Instances (Class – Line # / Entity / UI)** |
| 1 | The font used is tahoma | Login |
| 2 | The JLabel lblLogIn and the JButton btnLogin contains wrong text | Login |
| 3 | The text inside JTextField txtUsername and JPasswordField pwdPassword does not follow the UI design | Login |
| 4 | The drop-down for the state does not deactivate when the country selected does not have a state. | Add Supplier |
| 5 | The drop-down for the state and city does not reset when country is changed. | Add Supplier |
| 6 | The filter criteria panel does not close when the user clicks submit. | View Inventory  View Supplier  View Employee |
| 7 | Click and drag any part of the gui will result in moving the whole gui | View |

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| **Code Review** | | |
| **Sequence ID** | **Problem Description** | **Instances (Class – Line # / Entity / UI)** |
| 1 | The variables does not have "is" included in its name(i.e. “quad1” should be “isQuad1”, etc.). | Package view, File AddInventoryContent.java  public static class AddInventoryContentBuilder {  private boolean quad1;  private boolean quad2;  private boolean quad3;  private boolean quad4; |
| 2 | The boolean variables does not have "is" included in its name(i.e. “back” should be “isBack”, etc.). | Package view, File Content.java  public static class ContentBuilder {  private String caption;  private boolean back;  private boolean export;  private boolean filter;  private boolean add;  private boolean delete; public ContentBuilder back(boolean stat) { |
| 3 | The boolean variables does not have "is" included in its name(i.e. “stat” should be “isStat”). | Package view, File MainPanel.java  public void enableNotif(boolean stat){  panNotif.setVisible(false);  } |
| 4 | The boolean variables does not have "is" included in its name(i.e. “checkFields” should be “isCheckFields”). | Package view.purchaseOrder, File AddPO.java  public boolean checkFields(){ |
| 5 | When accessing the database, the same statements are executed and written every single time. | Package model  From File EmployeeDAO.java, Method get()  String query = "SELECT \* FROM employee";  PreparedStatement ps = DBConnection.getConnection().prepareStatement(query);  ResultSet rs = ps.executeQuery();  From File EmployeeDAO.java, Method get(String key)  String query = "SELECT \* FROM employee WHERE ID= ?";  PreparedStatement ps = DBConnection.getConnection().prepareStatement(query);  ps.setString(1, key);  ResultSet rs = ps.executeQuery();  (These are just a few of the places with almost duplicate code) |
| 6 | The variables used breaks the coding standards(i.e. “po” should be written as “purchaseOrder”. As stated the Coding Standards, abbreviated variable names are not allowed). | Package controller, model, view,  File EmployeeDAO.java,  File PurchaseOrderController.java,  File IDBCUD.java,  Button.java,  Content.java,  Gui.java,  Login.java,  MainPanel.java,  Message.java,  POTableModel.java,  TabInventory.java,  TabPO.java,  TabSupplier.java,  FilterEmployee.java,  TabEmployees.java,  FilterInventory.java,  AddPOItem.java,  FilterPO.java,  AddSupplier.java,  FilterSupplier.java  private PurchaseOrder po;  (These is just one of the places with abbreviated variable name) |
| 7 | The variable does not follow the naming coding standards(i.e. “serialVersionUID” should be "SERIAL\_VERSION\_UID". As stated in the Coding Standards, variables that act as constants shall be named in all caps with “\_” in between each word in the name). | Package view, File POTableModel.java  public class POTableModel extends DefaultTableModel{ private static final long serialVersionUID = 1L; |
| 8 | Unnecessary constructor: There is no need for a constructor that sets all attributes to null/""/0; this just opens up the unnecessary risk of adding Supplier objects with the blank names and blank addresses to the database | Package model, File Supplier.java, Constructor Supplier()  public Supplier() {  contacts = new ArrayList<SupplierContact>();  setName("");  setAddress("");  } |
| 9 | Unnecessary constructor: There is no need for a constructor that sets all attributes to null/""/0; this just opens up the unnecessary risk of adding Employee objects with the same IDs and blank names to the database | Package model, File Employee.java, Constructor Employee()  public Employee() {  setID(0);  setName("");  } |
| 10 | Inconsistency: Some classes have constructors that set all attributes to the values of the given arguments, as well as constructors that set all attributes to null/""/0, while others only have the former |  |

**Appendix A. Test Cases with Results and Findings**