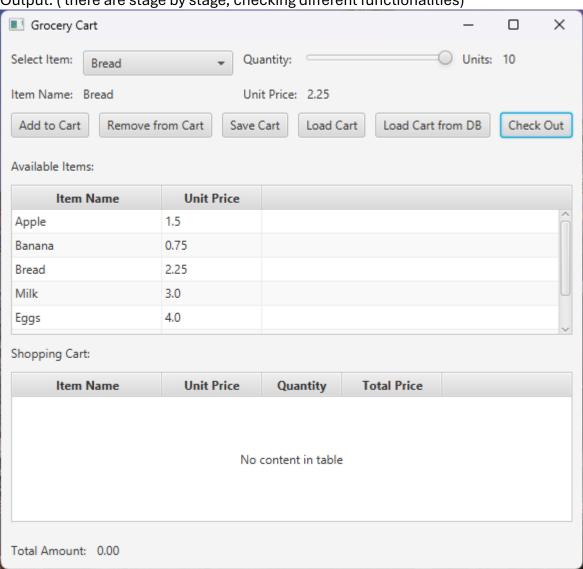
## Application Development(APD545NDD.12037.2251)

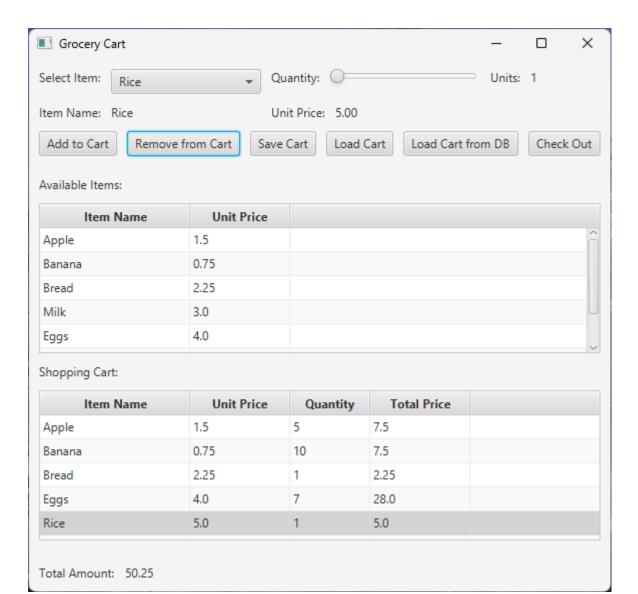
Full Name: Radmehr Behzadfar

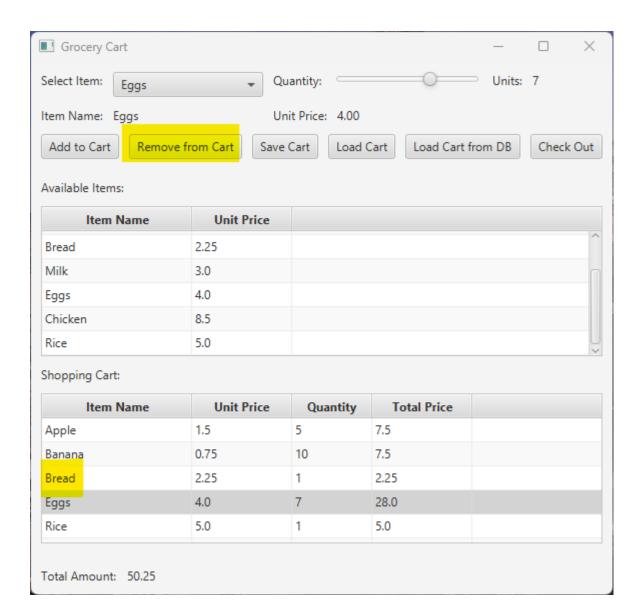
ld: 148786221

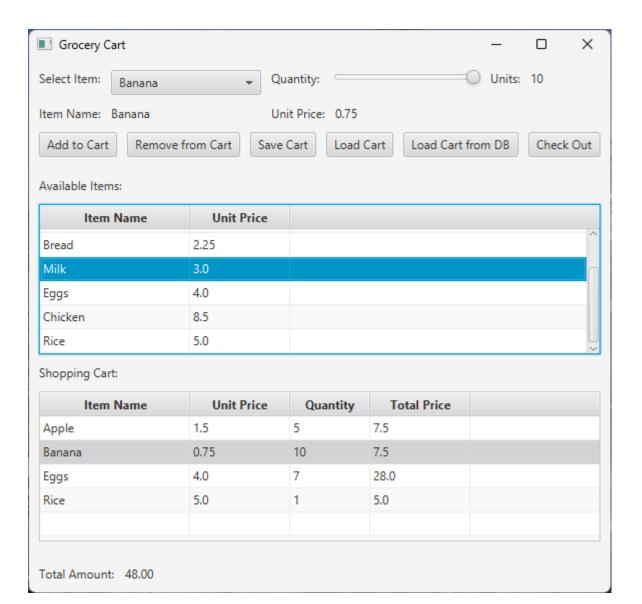
Seneca email: <a href="mailto:rbehzadfar@myseneca.ca">rbehzadfar@myseneca.ca</a>

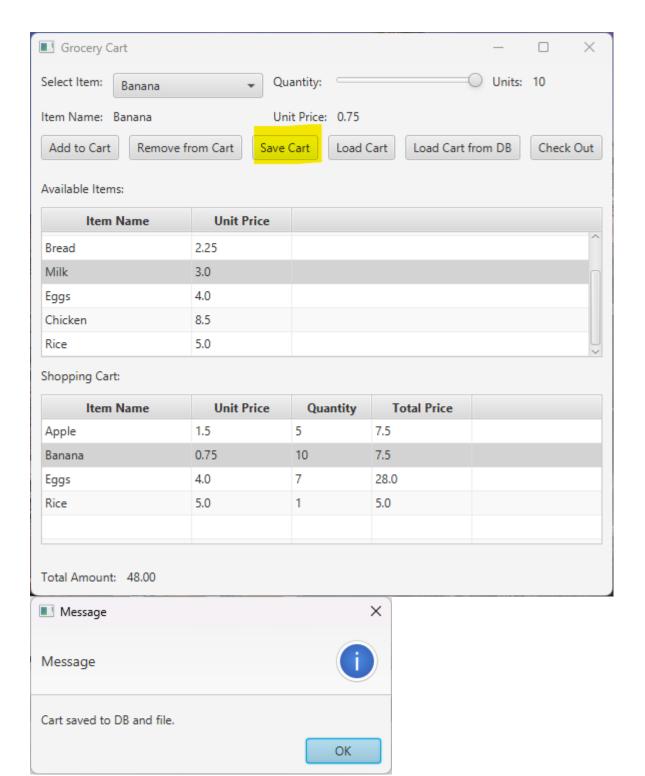
Output: (there are stage by stage, checking different functionalities)

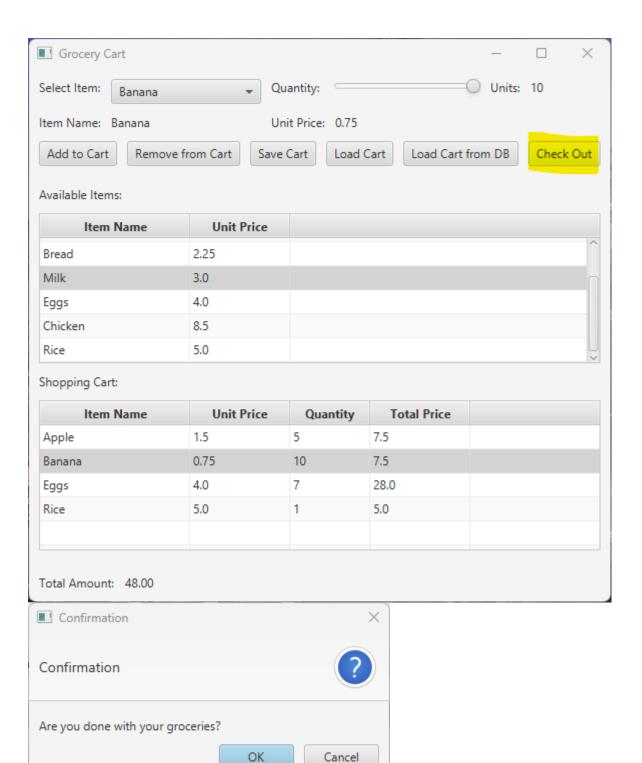


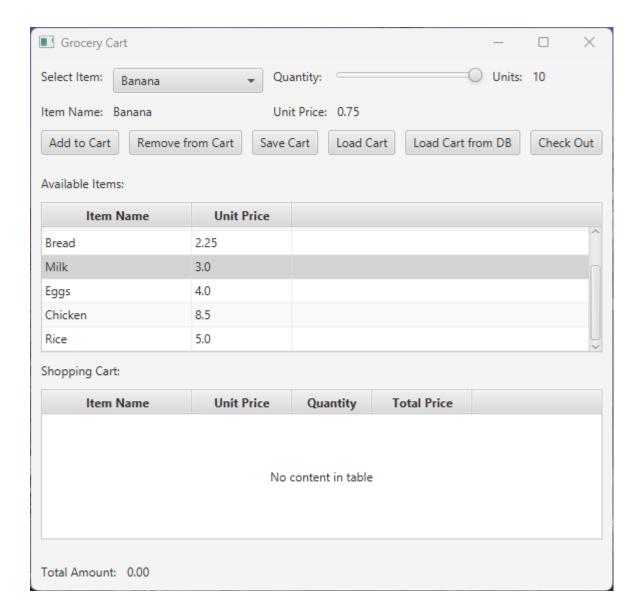


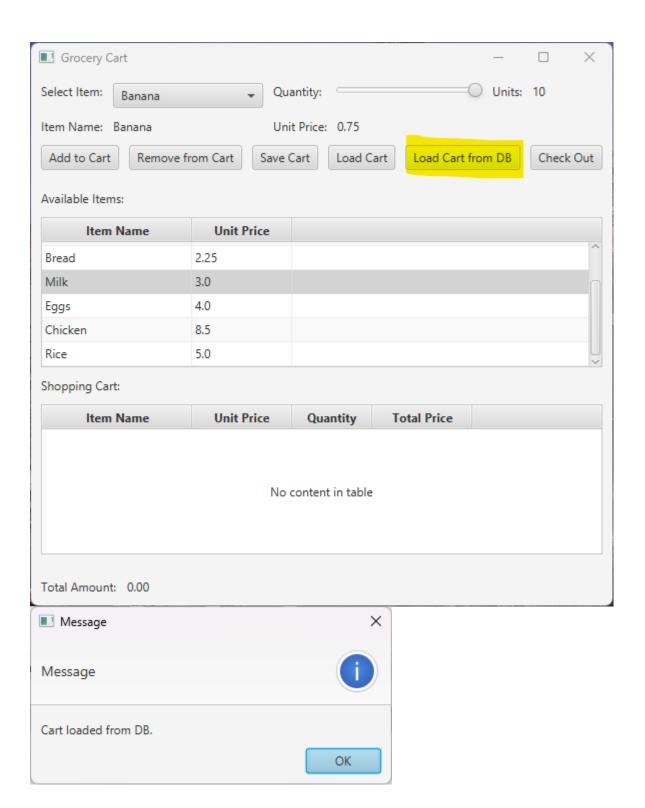


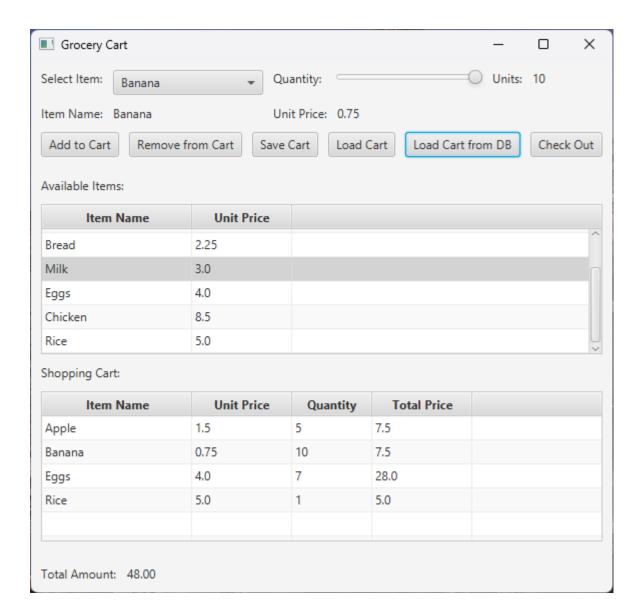


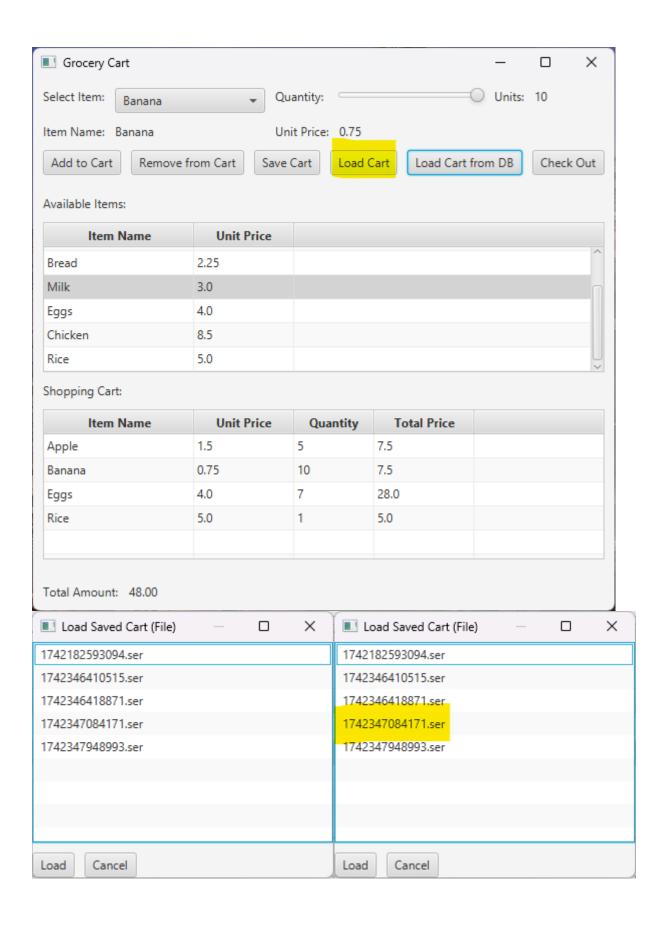


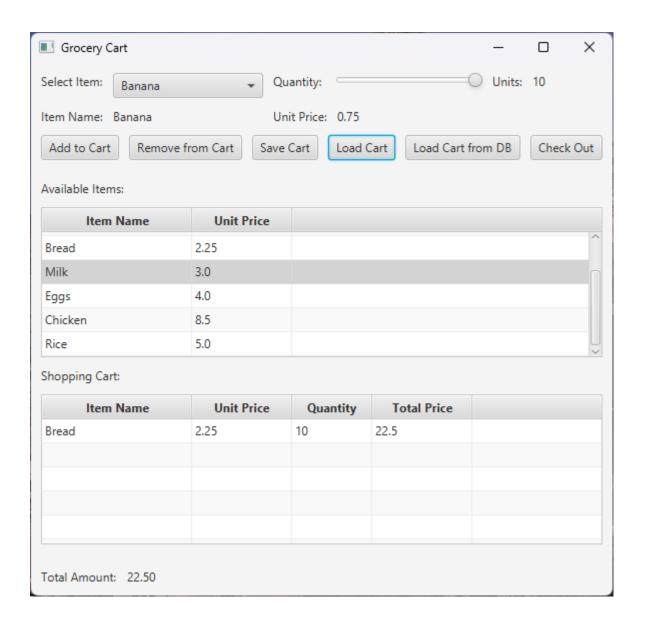












## Code:

## Cart.java:

Workshop #06

Course: APD545 - Winter

Last Name: BEHZADFAR

First Name: RADMEHR
ID: 148786221
Section:NDD
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Signature: RadmehrBehzadfar
Date:2025-03-29
*******/
package grocerystore;
import javafx.beans.binding.Bindings;
import javafx.beans.binding.DoubleBinding;
import javafx.collections.FXCollections;
import javafx.collections.ObservableList;
import javafx.fxml.FXML;
import javafx.fxml.FXMLLoader;
import javafx.scene.Scene;
import javafx.scene.control.Alert;
import javafx.scene.control.Button;

```
import javafx.scene.control.ButtonType;
import javafx.scene.control.ComboBox;
import javafx.scene.control.Label;
import javafx.scene.control.Slider;
import javafx.scene.control.TableColumn;
import javafx.scene.control.TableView;
import javafx.scene.Parent;
import javafx.stage.Modality;
import javafx.stage.Stage;
import java.util.List;
public class Cart {
 @FXML private ComboBox<Item> itemsComboBox;
 @FXML private Slider quantitySlider;
 @FXML private Label purchaseUnitsLabel;
 @FXML private Label unitValueLabel;
 @FXML private Label unitPriceValueLabel;
```

```
@FXML private TableView<Item> itemsTableView;
@FXML private TableColumn<Item, String> itemNameColumn;
@FXML private TableColumn<Item, Number> unitPriceColumn;
@FXML private TableView<ItemInCart> cartTableView;
@FXML private TableColumn<ItemInCart, String> cartItemNameColumn;
@FXML private TableColumn<ItemInCart, Number> cartUnitPriceColumn;
@FXML private TableColumn<ItemInCart, Number> cartQuantityColumn;
@FXML private TableColumn</te>
@FXML private Button addButton;
@FXML private Button removeButton;
@FXML private Button saveCartButton;
@FXML private Button loadCartButton;
@FXML private Button loadCartFromDBButton;
@FXML private Button checkOutButton;
@FXML private Label totalValueLabel;
```

private Model model;

```
private ObservableList<ItemInCart> cartObservableList =
FXCollections.observableArrayList();
 private User loggedInUser;
 @FXML
 private void initialize() {
   model = new Model();
   String csvPath = getClass().getResource("/ItemsMaster.csv").getPath();
   model.loadData(csvPath);
   setupAction();
 }
 public void setupAction() {
   items Combo Box. set Items (model.get Items Observable List());\\
   itemsComboBox.getSelectionModel().clearSelection();
   purchaseUnitsLabel.textProperty().bind(Bindings.format("%.0f",
quantitySlider.valueProperty()));
```

```
unitValueLabel.textProperty().bind(Bindings.createStringBinding(() -> {
     Item selectedItem = itemsComboBox.getValue();
     return selectedItem != null ? selectedItem.getName() : "";
   }, itemsComboBox.valueProperty()));
   unitPriceValueLabel.textProperty().bind(Bindings.createStringBinding(() -> {
     Item selectedItem = itemsComboBox.getValue();
     return selectedItem != null ? String.format("%.2f", selectedItem.getUnitPrice()) : "";
   }, itemsComboBox.valueProperty()));
   itemNameColumn.setCellValueFactory(cellData ->
cellData.getValue().nameProperty());
   unitPriceColumn.setCellValueFactory(cellData ->
cellData.getValue().unitPriceProperty());
   itemsTableView.setItems(model.getItemsObservableList());
   cartTableView.setItems(cartObservableList);
   cartItemNameColumn.setCellValueFactory(data ->
data.getValue().itemNameProperty());
   cartUnitPriceColumn.setCellValueFactory(data -> data.getValue().unitPriceProperty());
```

```
cartQuantityColumn.setCellValueFactory(data -> data.getValue().quantityProperty());
   cartTotalPriceColumn.setCellValueFactory(data ->
data.getValue().totalPriceProperty());
   addButton.setOnAction(event -> {
     Item selectedItem = itemsComboBox.getSelectionModel().getSelectedItem();
     if (selectedItem != null) {
       int quantity = (int) quantitySlider.getValue();
       ltemInCart itemInCart = new ItemInCart(selectedItem.getName(),
selectedItem.getUnitPrice(), quantity);
       cartObservableList.add(itemInCart);
     }
   });
   DoubleBinding totalBinding = Bindings.createDoubleBinding(() ->
     cartObservableList.stream().mapToDouble(ItemInCart::getTotalPrice).sum(),
     cartObservableList
   );
```

```
cartTableView.getSelectionModel().selectedItemProperty().addListener((obs,
oldSelection, newSelection) -> {
     if (newSelection != null) {
       for (int i = 0; i < model.getItemsObservableList().size(); i++) {
         if
(model.getItemsObservableList().get(i).getName().equals(newSelection.getItemName())) {
           itemsComboBox.getSelectionModel().select(i);
           quantitySlider.setValue(newSelection.getQuantity());
           break;
         }
       }
     }
   });
   removeButton.setOnAction(event -> {
     int selectedIndex = cartTableView.getSelectionModel().getSelectedIndex();
```

```
if (selectedIndex >= 0) {
       cartObservableList.remove(selectedIndex);
     }
   });
   saveCartButton.setOnAction(event -> {
     boolean successDB = DBHelper.saveCart(new
java.util.ArrayList<>(cartObservableList), loggedInUser.getId());
     CartFileHandler.saveCart(new java.util.ArrayList<>(cartObservableList));
     if(successDB){
       new Alert(Alert.AlertType.INFORMATION, "Cart saved to DB and
file.").showAndWait();
     } else {
       new Alert(Alert. Alert Type. ERROR, "Failed to save cart to DB."). showAndWait();
     }
   });
   loadCartButton.setOnAction(event -> {
```

```
try {
       FXMLLoader loader = new
FXMLLoader(getClass().getResource("/SavedCart.fxml"));
       Parent root = loader.load();
       SavedCartController controller = loader.getController();
       controller.setMainController(this);
       Stage stage = new Stage();
       stage.initModality(Modality.APPLICATION_MODAL);
       stage.setScene(new Scene(root));
       stage.setTitle("Load Saved Cart (File)");
       stage.showAndWait();
     } catch (Exception e) {
       e.printStackTrace();
     }
   });
   loadCartFromDBButton.setOnAction(event -> {
```

List<ItemInCart> loadedCart = DBHelper.loadCart(loggedInUser.getId());

```
if(loadedCart != null){
       loadCartData(loadedCart);
       new Alert(Alert. Alert Type. INFORMATION, "Cart loaded from DB."). showAndWait();
     } else {
       new Alert(Alert. Alert Type. ERROR, "No saved cart found in DB.").showAndWait();
     }
   });
   checkOutButton.setOnAction(event -> {
     Alert alert = new Alert(Alert.AlertType.CONFIRMATION, "Are you done with your
groceries?");
     alert.showAndWait().ifPresent(response -> {
       if (response == ButtonType.OK) {
         cartObservableList.clear();
       }
     });
   });
```

```
public void loadCartData(List<ItemInCart> loadedItems) {
   cartObservableList.clear();
   cart Observable List. add All (loaded Items);\\
 }
 public void setLoggedInUser(User user) {
   loggedInUser = user;
 }
CartFileHandler.java:
/************
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
```

}

```
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Date:2025-03-29
*****************
package grocerystore;
import java.io.File;
import java.io.FileOutputStream;
import java.io.FileInputStream;
import java.io.ObjectOutputStream;
import java.io.ObjectInputStream;
import java.util.ArrayList;
import java.util.List;
public class CartFileHandler {
 private static final String CARTS_DIR = "saved_carts";
 public static void saveCart(List<ItemInCart> cart) {
```

```
try {
     File dir = new File(CARTS_DIR);
     if (!dir.exists()) {
       dir.mkdir();
     }
     String filename = CARTS_DIR + File.separator + System.currentTimeMillis() + ".ser";
     ObjectOutputStream oos = new ObjectOutputStream(new
FileOutputStream(filename));
     oos.writeObject(cart);
     oos.close();
   } catch (Exception e) {
     e.printStackTrace();
   }
 }
 @SuppressWarnings("unchecked")
 public static List<ItemInCart> loadCart(File file) {
   try {
```

```
ObjectInputStream ois = new ObjectInputStream(new FileInputStream(file));
    List<ItemInCart> loaded = (List<ItemInCart>) ois.readObject();
    ois.close();
    return loaded;
  } catch (Exception e) {
    e.printStackTrace();
    return null;
  }
}
public static List<File> listSavedCarts() {
  List<File> result = new ArrayList<>();
  File dir = new File(CARTS_DIR);
  if (dir.exists() && dir.isDirectory()) {
    File[] files = dir.listFiles((d, name) -> name.endsWith(".ser"));
    if (files != null) {
      for (File f: files) {
```

```
result.add(f);
      }
    }
   }
   return result;
 }
}
DBHelper.java:
/***********
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
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Signature: RadmehrBehzadfar
Date:2025-03-29
```

```
***************
package grocerystore;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.Statement;
import java.io.ByteArrayOutputStream;
import java.io.ByteArrayInputStream;
import java.io.ObjectOutputStream;
import java.io.ObjectInputStream;
import java.util.List;
public class DBHelper {
 private static final String DB_URL = "jdbc:sqlite:shopcart.db";
 static {
   try (Connection conn = getConnection(); Statement stmt = conn.createStatement()) {
```

String createUsers = "CREATE TABLE IF NOT EXISTS users (id INTEGER PRIMARY KEY AUTOINCREMENT, username TEXT UNIQUE, password TEXT)";

String createCarts = "CREATE TABLE IF NOT EXISTS carts (id INTEGER PRIMARY KEY AUTOINCREMENT, user\_id INTEGER, cart\_data BLOB, timestamp DATETIME DEFAULT CURRENT\_TIMESTAMP)";

```
stmt.execute(createUsers);
     stmt.execute(createCarts);
   } catch(Exception e){
     e.printStackTrace();
   }
 }
 public static Connection getConnection() throws Exception {
   return DriverManager.getConnection(DB_URL);
 }
 public static boolean registerUser(String username, String password) {
   try (Connection conn = getConnection(); PreparedStatement pstmt =
conn.prepareStatement("INSERT INTO users(username, password) VALUES(?,?)")) {
     pstmt.setString(1, username);
     pstmt.setString(2, password);
```

```
pstmt.executeUpdate();
     return true;
   } catch(Exception e){
     return false;
   }
 }
  public static User loginUser(String username, String password) {
   try (Connection conn = getConnection(); PreparedStatement pstmt =
conn.prepareStatement("SELECT id, username FROM users WHERE username=? AND
password=?")) {
     pstmt.setString(1, username);
     pstmt.setString(2, password);
     ResultSet rs = pstmt.executeQuery();
     if(rs.next()){
       return new User(rs.getInt("id"), rs.getString("username"));
     }
   } catch(Exception e){
     e.printStackTrace();
```

```
}
   return null;
 }
 public static boolean saveCart(List<ItemInCart> cart, int userId) {
   try (Connection conn = getConnection(); PreparedStatement pstmt =
conn.prepareStatement("INSERT INTO carts(user_id, cart_data) VALUES(?,?)")) {
     ByteArrayOutputStream baos = new ByteArrayOutputStream();
     ObjectOutputStream oos = new ObjectOutputStream(baos);
     oos.writeObject(cart);
     oos.close();
     byte[] cartBytes = baos.toByteArray();
     pstmt.setInt(1, userId);
     pstmt.setBytes(2, cartBytes);
     pstmt.executeUpdate();
     return true;
   } catch(Exception e){
     e.printStackTrace();
     return false;
```

```
}
 }
 @SuppressWarnings("unchecked")
 public static List<ItemInCart> loadCart(int userId) {
   try (Connection conn = getConnection(); PreparedStatement pstmt =
conn.prepareStatement("SELECT cart_data FROM carts WHERE user_id=? ORDER BY
timestamp DESC LIMIT 1")) {
     pstmt.setInt(1, userId);
     ResultSet rs = pstmt.executeQuery();
     if(rs.next()){
       byte[] cartBytes = rs.getBytes("cart_data");
       ByteArrayInputStream bais = new ByteArrayInputStream(cartBytes);
       ObjectInputStream ois = new ObjectInputStream(bais);
       List<ItemInCart> cart = (List<ItemInCart>) ois.readObject();
       ois.close();
       return cart;
     }
   } catch(Exception e){
```

```
e.printStackTrace();
  }
  return null;
 }
}
Item.java:
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
This assignment represents my own work in accordance with <u>Seneca</u> Academic Policy.
Signature: RadmehrBehzadfar
Date:2025-03-29
****************
package grocerystore;
```

```
import javafx.beans.property.SimpleDoubleProperty;
import javafx.beans.property.SimpleStringProperty;
import java.io. Serializable;
public class Item implements Serializable {
  private static final long serialVersionUID = 1L;
  private transient SimpleStringProperty name;
  private transient SimpleDoubleProperty unitPrice;
  private String nameCache;
  private double priceCache;
  public Item(String name, double unitPrice) {
   this.name = new SimpleStringProperty(name);
   this.unitPrice = new SimpleDoubleProperty(unitPrice);
   this.nameCache = name;
   this.priceCache = unitPrice;
 }
```

```
public String getName() {
  return name.get();
}
public void setName(String name) {
  this.name.set(name);
  this.nameCache = name;
}
public double getUnitPrice() {
  return unitPrice.get();
}
public void setUnitPrice(double unitPrice) {
  this.unitPrice.set(unitPrice);
 this.priceCache = unitPrice;
```

```
}
 public SimpleStringProperty nameProperty() {
   return name;
 }
 public SimpleDoubleProperty unitPriceProperty() {
   return unitPrice;
 }
 private void writeObject(java.io.ObjectOutputStream out) throws java.io.IOException {
   out.defaultWriteObject();
 }
 private void readObject(java.io.ObjectInputStream in) throws java.io.IOException,
ClassNotFoundException {
   in.defaultReadObject();
   name = new SimpleStringProperty(nameCache);
```

```
unitPrice = new SimpleDoubleProperty(priceCache);
 }
 @Override
 public String toString() {
  return getName();
 }
}
ItemInCart.java:
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
```

Signature: RadmehrBehzadfar

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```
Date:2025-03-29
```

```
*******************************
package grocerystore;
import javafx.beans.property.SimpleDoubleProperty;
import javafx.beans.property.SimpleIntegerProperty;
import javafx.beans.property.SimpleStringProperty;
import java.io. Serializable;
public class ItemInCart implements Serializable {
 private static final long serialVersionUID = 1L;
 private transient SimpleStringProperty itemName;
 private transient SimpleDoubleProperty unitPrice;
 private transient SimpleIntegerProperty quantity;
 private transient SimpleDoubleProperty totalPrice;
 private String itemNameCache;
 private double unitPriceCache;
```

private int quantityCache;

```
private double totalPriceCache;
public ItemInCart(String itemName, double unitPrice, int quantity) {
 this.itemName = new SimpleStringProperty(itemName);
 this.unitPrice = new SimpleDoubleProperty(unitPrice);
 this.quantity = new SimpleIntegerProperty(quantity);
 this.totalPrice = new SimpleDoubleProperty(unitPrice * quantity);
 this.itemNameCache = itemName;
 this.unitPriceCache = unitPrice;
 this.quantityCache = quantity;
 this.totalPriceCache = unitPrice * quantity;
}
public String getItemName() {
  return itemName.get();
}
```

```
public void setItemName(String itemName) {
  this.itemName.set(itemName);
  this.itemNameCache = itemName;
  updateTotalPrice();
}
public double getUnitPrice() {
  return unitPrice.get();
}
public void setUnitPrice(double unitPrice) {
  this.unitPrice.set(unitPrice);
  this.unitPriceCache = unitPrice;
  updateTotalPrice();
}
public int getQuantity() {
```

```
return quantity.get();
}
public void setQuantity(int quantity) {
  this.quantity.set(quantity);
  this.quantityCache = quantity;
  updateTotalPrice();
}
public double getTotalPrice() {
  return totalPrice.get();
}
private void updateTotalPrice() {
  totalPrice.set(getUnitPrice() * getQuantity());
  totalPriceCache = getUnitPrice() * getQuantity();
}
```

```
public SimpleStringProperty itemNameProperty() {
  return itemName;
}
public SimpleDoubleProperty unitPriceProperty() {
  return unitPrice;
}
public SimpleIntegerProperty quantityProperty() {
  return quantity;
}
public SimpleDoubleProperty totalPriceProperty() {
  return totalPrice;
}
```

```
private void writeObject(java.io.ObjectOutputStream out) throws java.io.IOException {
   updateTotalPrice();
   out.defaultWriteObject();
 }
 private void readObject(java.io.ObjectInputStream in) throws java.io.IOException,
ClassNotFoundException {
   in.defaultReadObject();
   itemName = new SimpleStringProperty(itemNameCache);
   unitPrice = new SimpleDoubleProperty(unitPriceCache);
   quantity = new SimpleIntegerProperty(quantityCache);
   totalPrice = new SimpleDoubleProperty(totalPriceCache);
 }
}
LoginController.java:
Workshop #06
Course: APD545 - Winter
```

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Date:2025-03-29
***************************************
package grocerystore;
import javafx.fxml.FXML;
import javafx.scene.control.TextField;
import javafx.scene.control.PasswordField;
import javafx.scene.control.Alert;
import javafx.scene.control.Alert.AlertType;
import javafx.fxml.FXMLLoader;
import javafx.scene.Parent;
import javafx.scene.Scene;

```
import javafx.stage.Stage;
public class LoginController {
 @FXML private TextField usernameField;
 @FXML private PasswordField passwordField;
 @FXML
 private void handleLogin() {
   String username = usernameField.getText();
   String password = passwordField.getText();
   if(username.isEmpty() || password.isEmpty()){
     new Alert(AlertType.ERROR, "Please enter username and
password.").showAndWait();
     return;
   }
   User user = DBHelper.loginUser(username, password);
   if(user != null){
```

```
new Alert(AlertType.INFORMATION, "Welcome" + user.getUsername() +
"!").showAndWait();
     try {
       FXMLLoader loader = new FXMLLoader(getClass().getResource("/layout.fxml"));
       Parent root = loader.load();
       Cart cartController = loader.getController();
       cartController.setLoggedInUser(user);
       Stage stage = new Stage();
       stage.setTitle("Grocery Cart");
       stage.setScene(new Scene(root));
       stage.show();
       ((Stage)usernameField.getScene().getWindow()).close();
     } catch(Exception e){
       e.printStackTrace();
     }
   } else {
     new Alert(AlertType.ERROR, "Invalid credentials.").showAndWait();
```

```
}
 @FXML
 private void openRegister(){
   try {
    FXMLLoader loader = new FXMLLoader(getClass().getResource("/register.fxml"));
    Parent root = loader.load();
    Stage stage = new Stage();
    stage.setTitle("Register");
    stage.setScene(new Scene(root));
    stage.show();
  } catch(Exception e){
    e.printStackTrace();
   }
 }
MainApp.java:
```

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Section:NDD
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Signature: RadmehrBehzadfar
Date:2025-03-29
********
package grocerystore;
import javafx.application.Application;
import javafx.fxml.FXMLLoader;
import javafx.scene.Scene;
import javafx.scene.Parent;
import javafx.stage.Stage;

```
public class MainApp extends Application {
 @Override
 public void start(Stage primaryStage) throws Exception {
   Parent root = FXMLLoader.load(getClass().getResource("/login.fxml"));
   primaryStage.setTitle("Login");
   primaryStage.setScene(new Scene(root));
   primaryStage.show();
 }
 public static void main(String[] args) {
   launch(args);
 }
}
Model.java:
/**************
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
```

First Name: RADMEHR



```
itemsObservableList = FXCollections.observableArrayList();
}
public ObservableList<Item> getItemsObservableList() {
  return itemsObservableList;
}
public void loadData(String csvFilePath) {
  try (BufferedReader br = new BufferedReader(new FileReader(csvFilePath))) {
    String line;
    while ((line = br.readLine()) != null) {
      String[] values = line.split(",");
      if (values.length > 0) {
        String name = values[0].trim();
        double unitPrice = 10.0;
        if (values.length > 1) {
          try {
```

```
unitPrice = Double.parseDouble(values[1].trim());
          } catch (NumberFormatException e) {}
         }
         itemsObservableList.add(new Item(name, unitPrice));
       }
     }
   } catch (IOException e) {
     e.printStackTrace();
   }
 }
}
RegisterController.java:
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
```

Section:NDD
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Signature: RadmehrBehzadfar
Date:2025-03-29
*******/
package grocerystore;
import javafx.fxml.FXML;
import javafx.scene.control.TextField;
import javafx.scene.control.PasswordField;
import javafx.scene.control.Alert;
import javafx.scene.control.Alert.AlertType;
import javafx.stage.Stage;
public class RegisterController {
@FXML private TextField usernameField;
@FXML private PasswordField passwordField;
@FXML private PasswordField confirmPasswordField;

```
@FXML
private void handleRegister(){
 String username = usernameField.getText();
 String password = passwordField.getText();
 String confirm = confirmPasswordField.getText();
 if(username.isEmpty() || password.isEmpty() || confirm.isEmpty()){
   new Alert(AlertType.ERROR, "All fields are required.").showAndWait();
   return;
 }
 if(!password.equals(confirm)){
   new Alert(AlertType.ERROR, "Passwords do not match.").showAndWait();
   return;
 }
 boolean registered = DBHelper.registerUser(username, password);
 if(registered){
   new Alert(AlertType.INFORMATION, "Registration successful.").showAndWait();
```

```
((Stage)usernameField.getScene().getWindow()).close();
  } else {
    new Alert(AlertType.ERROR, "Registration failed. Username may already
exist.").showAndWait();
   }
 }
}
SavedCartController.java:
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
This assignment represents my own work in accordance with Seneca Academic Policy.
Signature: RadmehrBehzadfar
Date:2025-03-29
```

```
****************
package grocerystore;
import javafx.fxml.FXML;
import javafx.scene.control.ListView;
import javafx.scene.control.Button;
import javafx.stage.Stage;
import java.io.File;
import java.util.List;
public class SavedCartController {
 @FXML private ListView<String> savedCartList;
 @FXML private Button loadButton;
 @FXML private Button cancelButton;
 private Cart mainController;
 private List<File> cartFiles;
```

@FXML

```
private void initialize() {
  cartFiles = CartFileHandler.listSavedCarts();
 for (File f : cartFiles) {
   savedCartList.getItems().add(f.getName());
 }
}
@FXML
private void handleLoad() {
 int index = savedCartList.getSelectionModel().getSelectedIndex();
 if (index >= 0) {
   File file = cartFiles.get(index);
   List<ItemInCart> loadedCart = CartFileHandler.loadCart(file);
   if (loadedCart != null) {
      mainController.loadCartData(loadedCart);
   }
   Stage stage = (Stage) loadButton.getScene().getWindow();
```

```
stage.close();
   }
 }
 @FXML
 private void handleCancel() {
   Stage stage = (Stage) cancelButton.getScene().getWindow();
   stage.close();
 }
 public void setMainController(Cart c) {
   mainController = c;
 }
}
User.java:
Workshop #06
```

Course: APD545 - Winter

Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
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Date:2025-03-29
***************************************
package grocerystore;
import java.io.Serializable;
public class <u>User</u> implements Serializable {
private int id;
private String username;
public User(int id, String username) {
this.id = id;

```
this.username = username;
 }
 public int getId() {
   return id;
 }
 public String getUsername() {
   return username;
 }
}
ItemMaster.csv:
Apple,1.50
Banana,0.75
Bread,2.25
Milk,3.00
Eggs,4.00
Chicken,8.50
```

## Rice, 5.00 layout.fxml: <?xml version="1.0" encoding="UTF-8"?> <!--Workshop #06 Course: APD545 - Winter Last Name: BEHZADFAR First Name: RADMEHR ID: 148786221 Section:NDD This assignment represents my own work in accordance with **Seneca** Academic Policy. Signature: RadmehrBehzadfar Date:2025-03-29 \* -->

<?import javafx.geometry.Insets?>

<?import javafx.scene.control.Button?>

```
<?import javafx.scene.control.ComboBox?>
<?import javafx.scene.control.Label?>
<?import javafx.scene.control.Slider?>
<?import javafx.scene.control.TableColumn?>
<?import javafx.scene.control.TableView?>
<?import javafx.scene.layout.BorderPane?>
<?import javafx.scene.layout.HBox?>
<?import javafx.scene.layout.VBox?>
<<u>BorderPane</u> xmlns:fx="http://javafx.com/fxml"
     xmlns="http://javafx.com/javafx"
     fx:controller="grocerystore.Cart">
 <top>
   <VBox spacing="10">
     <padding>
       <Insets top="10" right="10" bottom="10" left="10"/>
     </padding>
```

```
<HBox spacing="10">
 < Label text="Select Item:"/>
 < ComboBox fx:id="itemsComboBox" prefWidth="150"/>
 < Label text="Quantity:"/>
 <Slider fx:id="quantitySlider" min="1" max="10" value="1" prefWidth="150"/>
 <Label text="Units:"/>
 <Label fx:id="purchaseUnitsLabel" prefWidth="50"/>
</HBox>
<HBox spacing="10">
 <Label text="Item Name:"/>
 <Label fx:id="unitValueLabel" prefWidth="150"/>
 <Label text="Unit Price:"/>
 <Label fx:id="unitPriceValueLabel" prefWidth="100"/>
</HBox>
<HBox spacing="10">
 <Button fx:id="addButton" text="Add to Cart"/>
 <Button fx:id="removeButton" text="Remove from Cart"/>
```

```
<Button fx:id="saveCartButton" text="Save Cart"/>
     <Button fx:id="loadCartButton" text="Load Cart"/>
     <Button fx:id="loadCartFromDBButton" text="Load Cart from DB"/>
     <Button fx:id="checkOutButton" text="Check Out"/>
   </HBox>
 </VBox>
</top>
<center>
 <VBox spacing="10">
   <padding>
     <Insets top="10" right="10" bottom="10" left="10"/>
   </padding>
   < Label text="Available Items:"/>
   < Table View fx:id="items Table View" prefHeight="150">
     <columns>
       <TableColumn fx:id="itemNameColumn" text="Item Name" prefWidth="150"/>
       <TableColumn fx:id="unitPriceColumn" text="Unit Price" prefWidth="100"/>
```

```
</columns>
     </TableView>
     < Label text="Shopping Cart:"/>
     < Table View fx:id="cart Table View" prefHeight="150">
       <columns>
         <TableColumn fx:id="cart/temNameColumn" text="/tem Name"
prefWidth="150"/>
         <TableColumn fx:id="cartUnitPriceColumn" text="Unit Price" prefWidth="100"/>
         <TableColumn fx:id="cartQuantityColumn" text="Quantity" prefWidth="80"/>
         <TableColumn fx:id="cartTotalPriceColumn" text="Total Price"
prefWidth="100"/>
       </columns>
     </TableView>
   </VBox>
 </center>
 <body><br/><br/>dottom></br/></br/></br/>
   <HBox spacing="10">
     <padding>
```

```
<Insets top="10" right="10" bottom="10" left="10"/>
    </padding>
    <Label text="Total Amount:"/>
    < Label fx:id="totalValueLabel" prefWidth="100"/>
   </HBox>
 </bottom>
</BorderPane>
login.fxml:
<?xml version="1.0" encoding="UTF-8"?>
<!--
/*************
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
Section:NDD
```

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```
Signature: RadmehrBehzadfar
Date:2025-03-29
-->
<?import javafx.geometry.Insets?>
<?import javafx.scene.control.Button?>
<?import javafx.scene.control.Label?>
<?import javafx.scene.control.PasswordField?>
<?import javafx.scene.control.TextField?>
<?import javafx.scene.layout.GridPane?>
<<u>GridPane</u> xmlns:fx="http://javafx.com/fxml"
    fx:controller="grocerystore.LoginController"
    alignment="center" hgap="10" vgap="10">
 <padding>
   < Insets top="20" right="20" bottom="20" left="20"/>
 </padding>
```

```
<Label text="Username:" GridPane.rowIndex="0" GridPane.columnIndex="0"/>
 <TextField fx:id="usernameField" GridPane.rowIndex="0" GridPane.columnIndex="1"/>
 <Label text="Password:" GridPane.rowIndex="1" GridPane.columnIndex="0"/>
 <PasswordField fx:id="passwordField" GridPane.rowIndex="1"</pre>
GridPane.columnIndex="1"/>
 <Button text="Login" onAction="#handleLogin" GridPane.rowIndex="2"
GridPane.columnIndex="0"/>
 <Button text="Register" onAction="#openRegister" GridPane.rowIndex="2"
GridPane.columnIndex="1"/>
</GridPane>
register.fxml:
<?xml version="1.0" encoding="UTF-8"?>
<!--
/***********
Workshop #06
Course: APD545 - Winter
Last Name: BEHZADFAR
First Name: RADMEHR
ID: 148786221
```

## Section:NDD This assignment represents my own work in accordance with <u>Seneca</u> Academic Policy. Signature: RadmehrBehzadfar Date:2025-03-29 --> <?import javafx.geometry.Insets?> <?import javafx.scene.control.Button?> <?import javafx.scene.control.Label?> <?import javafx.scene.control.PasswordField?> <?import javafx.scene.control.TextField?> <?import javafx.scene.layout.GridPane?> <<u>GridPane</u> xmlns:fx="http://javafx.com/fxml"

GridPane xmlns:fx="http://javafx.com/fxml"

fx:controller="grocerystore.RegisterController"

alignment="center" hgap="10" vgap="10">

<padding></pa

```
< Insets top="20" right="20" bottom="20" left="20"/>
 </padding>
 <Label text="Username:" GridPane.rowIndex="0" GridPane.columnIndex="0"/>
 <TextField fx:id="usernameField" GridPane.rowIndex="0" GridPane.columnIndex="1"/>
 <Label text="Password:" GridPane.rowIndex="1" GridPane.columnIndex="0"/>
 <PasswordField fx:id="passwordField" GridPane.rowIndex="1"</pre>
GridPane.columnIndex="1"/>
 <Label text="Confirm Password:" GridPane.rowIndex="2" GridPane.columnIndex="0"/>
 <PasswordField fx:id="confirmPasswordField" GridPane.rowIndex="2"</pre>
GridPane.columnIndex="1"/>
 <Button text="Register" onAction="#handleRegister" GridPane.rowIndex="3"
GridPane.columnIndex="1"/>
</GridPane>
SavedCart.fxml:
<?xml version="1.0" encoding="UTF-8"?>
<!--
/*************
Workshop #06
Course: APD545 - Winter
```

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***************************************
>
<b import javafx.scene.control.Button?>
<b import javafx.scene.control.ListView?>
<b import javafx.scene.layout.HBox?>
<b import javafx.scene.layout.VBox?>
< <u>VBox</u> xmlns="http://javafx.com/javafx" xmlns:fx="http://javafx.com/fxml"
fx:controller="grocerystore.SavedCartController" spacing="10">
<children></children>

</VBox>