**Meeting Minutes 4: Service Layer Completion and Testing**

**Subject:** Service Layer Testing and Final Adjustments  
**Location:** Trottier Building, 3rd Floor  
**Start Time:** November 9, 6 pm  
**Duration:** 4 hours

**Attendees:** Paolo, Peter Zhang, Emile, Jeff, Rami

**Topics:**

* Review of Service Layer Implementation Progress:
  + Each team member provided an update on the functionality and status of their assigned service classes.
    - Paolo: Completed OrderService, implemented methods for order management, and confirmed basic integration with other services.
    - Peter Zhang: Finalized InventoryService, handling product catalog operations and inventory management tasks.
    - Emile: Completed CustomerService, implementing account management features and ensuring data integrity.
* Testing Results and Findings:
  + Discussed results from initial unit and integration tests for each service class:
    - Basic CRUD operations and business methods are functioning as expected.
    - Identified minor issues in OrderService related to order status updates, which require adjustments in handling.
    - Discovered some inconsistencies in data associations in CustomerService, necessitating slight modifications to ensure alignment with the domain model.
* Integration Adjustments and Code Refinement:
  + Made updates to service classes to address issues uncovered during testing, including:
    - Refinements in error handling and validation logic to prevent data inconsistencies.
    - Adjustments to method signatures in InventoryService and CustomerService for consistent data handling.
* Expansion of Test Coverage:
  + Expanded test coverage to include edge cases and complex scenarios:
    - Verified correct handling of exceptional cases, such as invalid input data and failed transactions.
    - Added integration tests for cross-service interactions, ensuring that methods correctly interact with the persistence layer.
* Documentation and Project Management Update:
  + Began documenting service endpoints, including method details, expected parameters, and responses.
  + Updated the GitHub backlog to reflect testing progress, task status, and issues addressed.

**Outcomes:**

* Started with the controller method and DTO’S
* **Tasks Completed:** The service layer was fully implemented.
* **Next Steps:** Proceed to develop controllers and DTOs.