Software Name: GET-Book-DETAILS-SERVICE

1. Introduction

Creating a service for bookstore which have many different books from different publishing house, a bookstore requests a list of Daily book prices from each publishing house. each publishing house has a specific format based on it, service handling a request that send to backend “publishing house”. Backends Formats (XML, JSON, DFDL).

2. Scope and Purpose

Using ESQL and Aggregation Nodes create a MQs protocol service which propagates received message with different formats to different backends then collects replies from backends and reply with the consumer “bookstore” as a single message. The received message will be a list of books and backend provider service “publishing house” will reply with the price of each book from this list.

In “Fan-out” message flow Bookstore will sent request as XML message format, this message contains list of books, service splits the request to multiple single requests based on publishing house we need to call, will convert each single request according to each backend message domain.

In “Fan-in” message flow will receive Each backend response as BLOB message format then convert each response to XML message format then collect all these responses and send them as a list of prices to the bookstore.

3. Abbreviations

IIB ‘’IBM Integration Bus V10’’

IBM MQ “IBM Message Queuing”

4. System Environment

Operating System: Windows

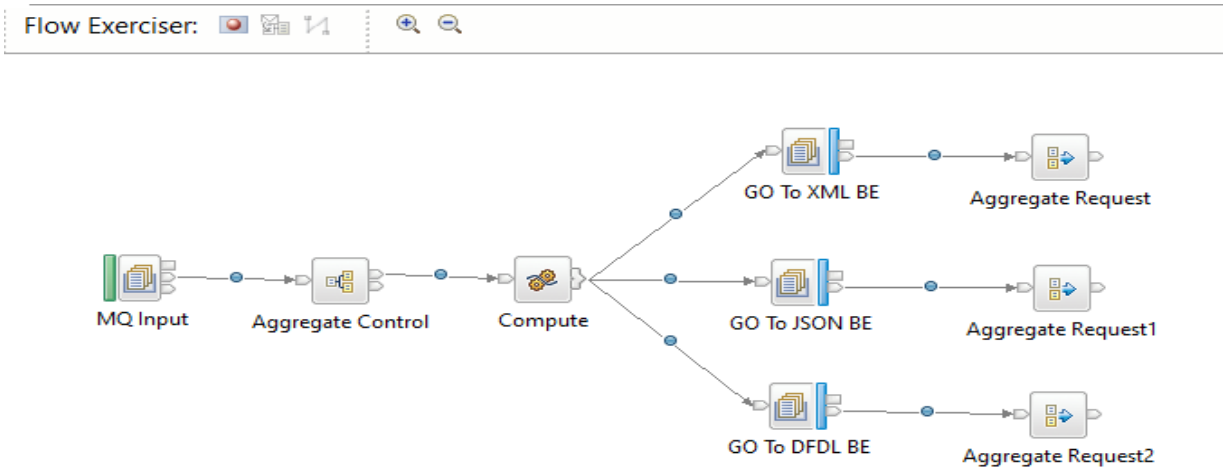
Development: IBM Integration Bus V10 + IBM MQ Explorer

Test: Rfhutil

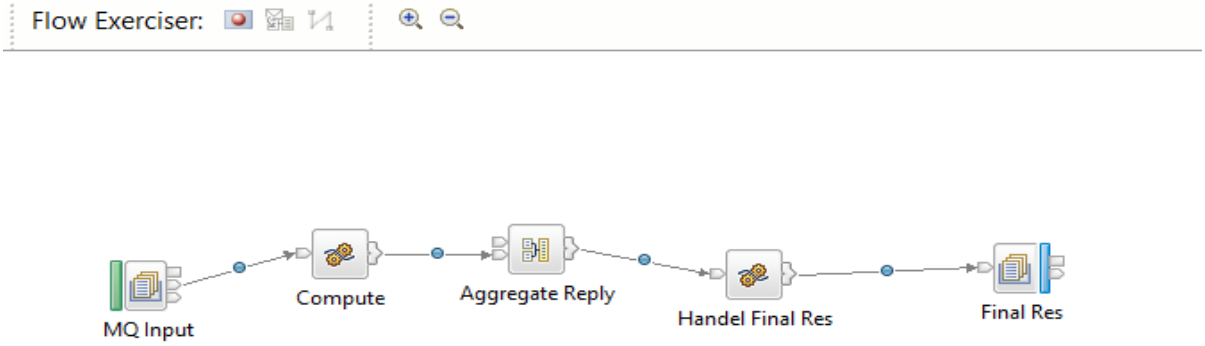
Diagrams: Draw io

4. UI Design

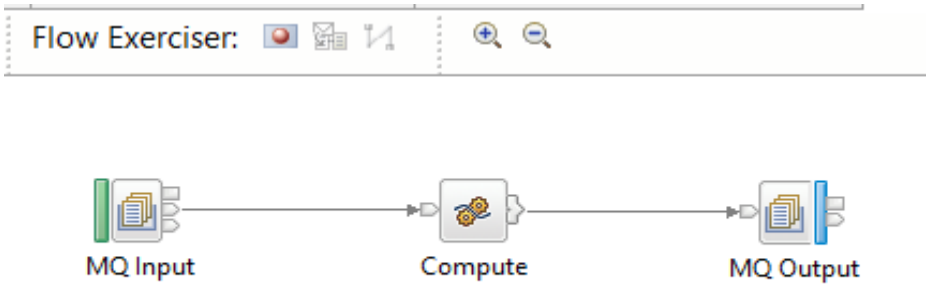
Some Screen Shoots.



Fan-Out Message Flow

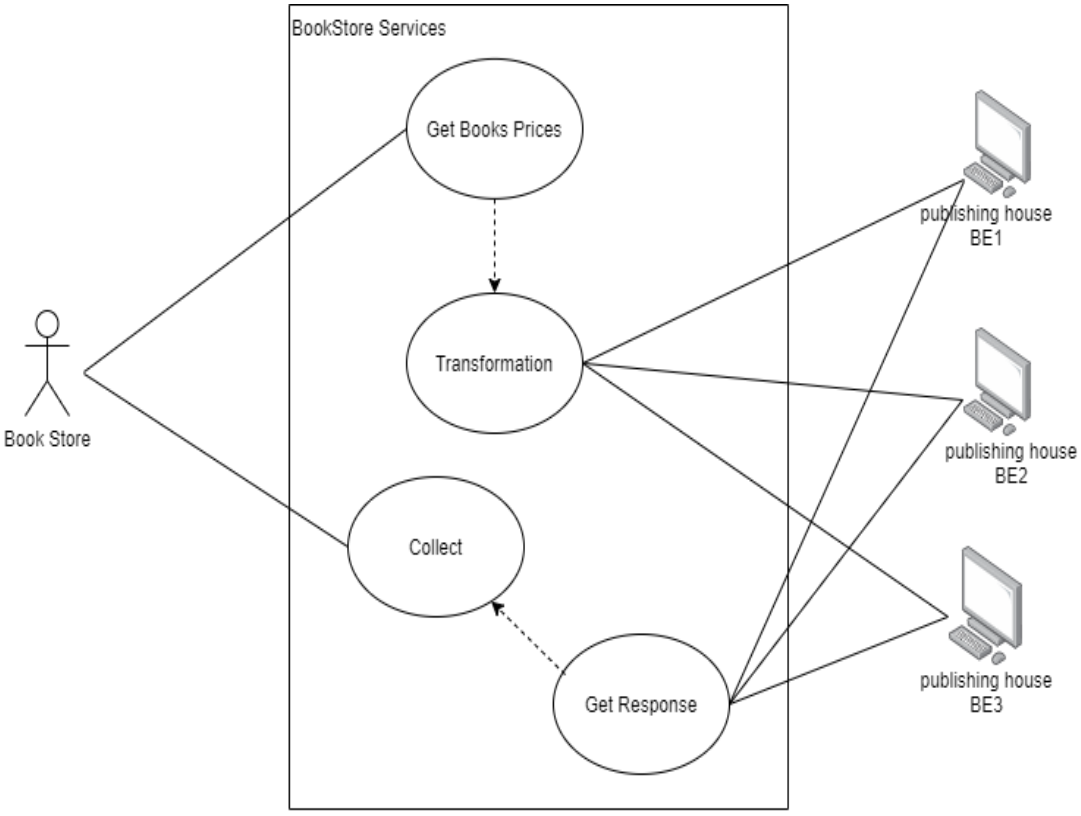


Fan-in Message Flow

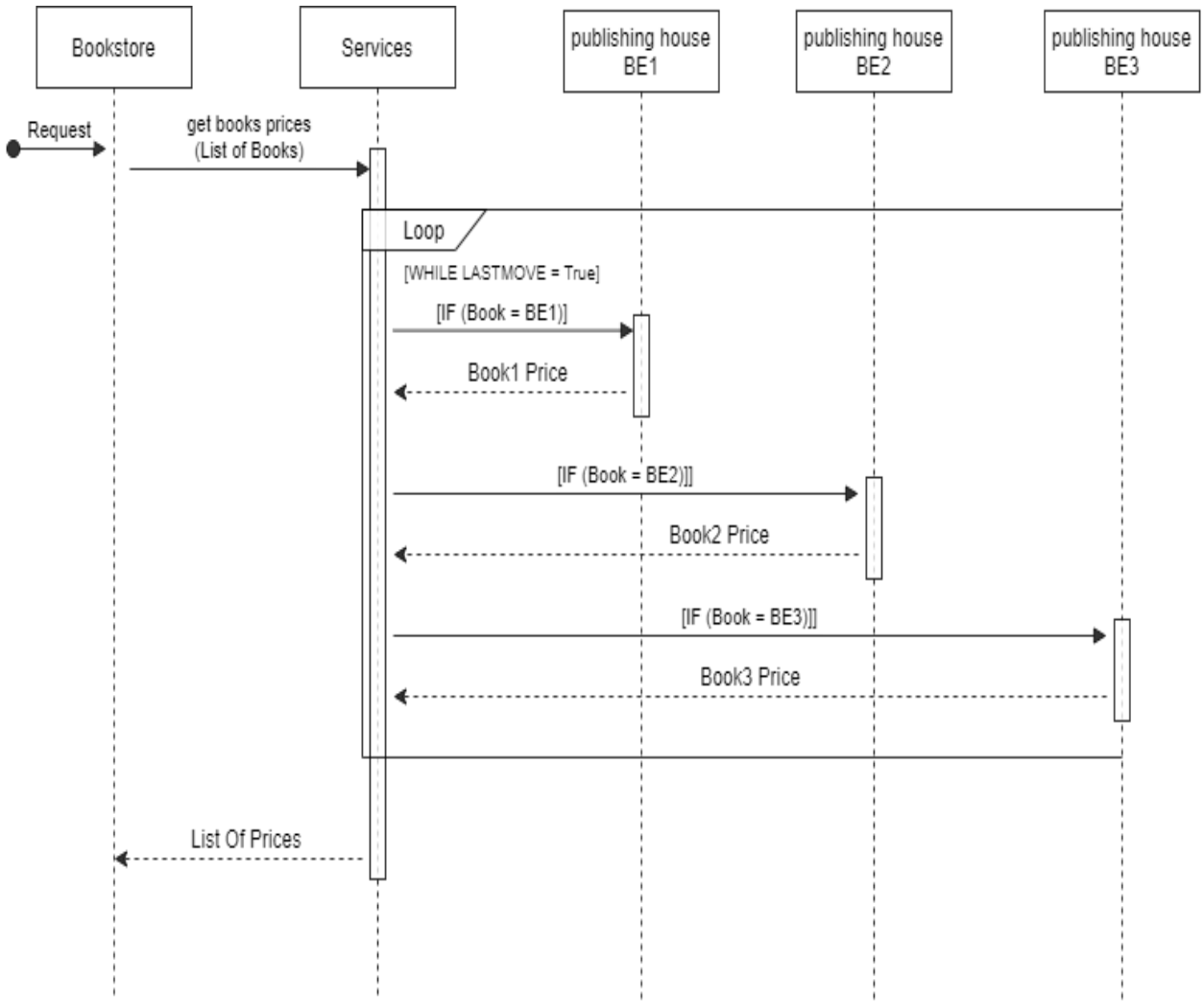


BackEnds Message Flow

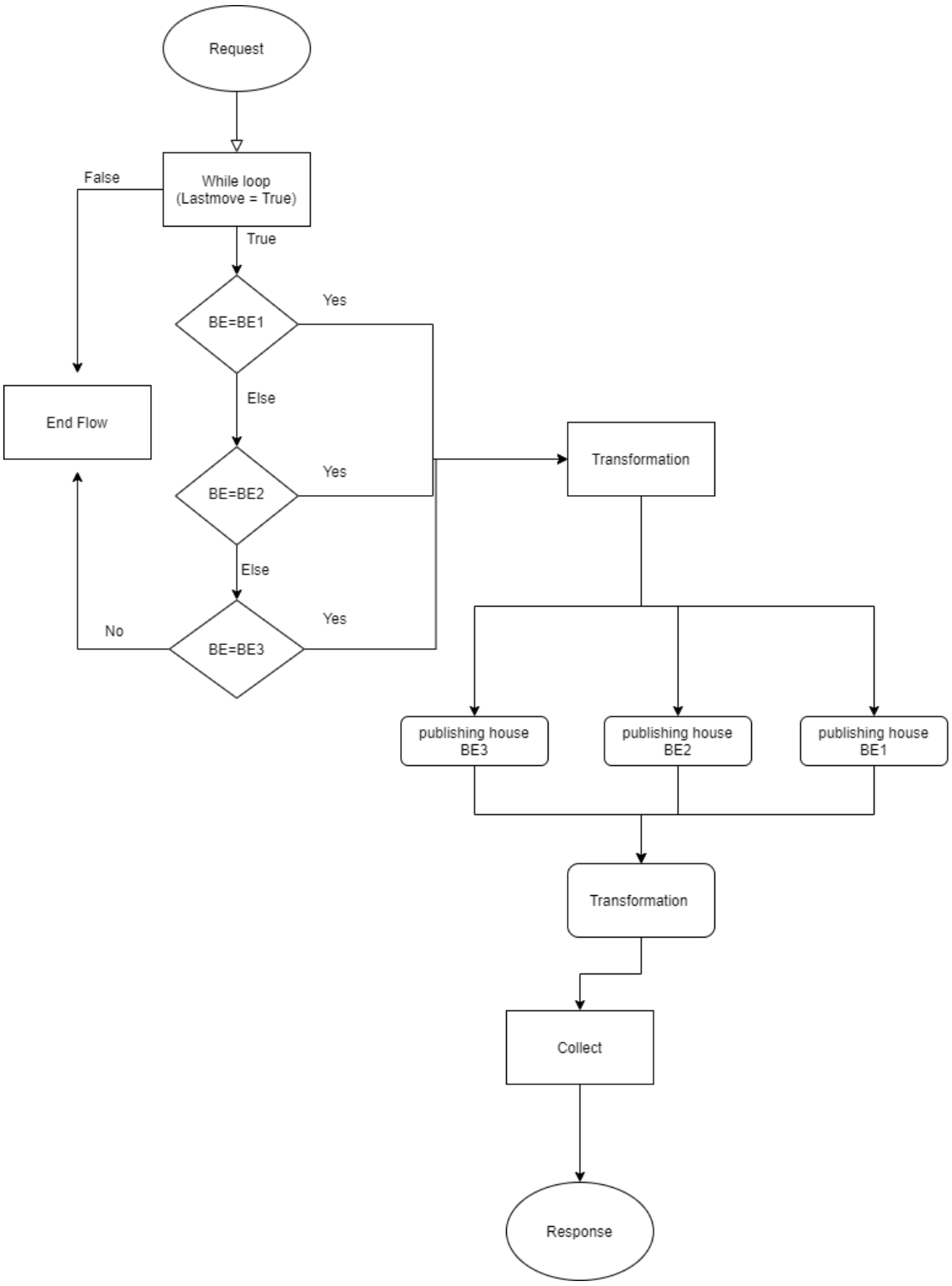
5.Data Flow Diagrams



Use Case Diagram



Sequence Diagram



FlowChart Diagram