



**LIBcore**

Library  
Management  
Software

# LIBcore

## Phase 2

Alejandro Fernandez

Steven Le

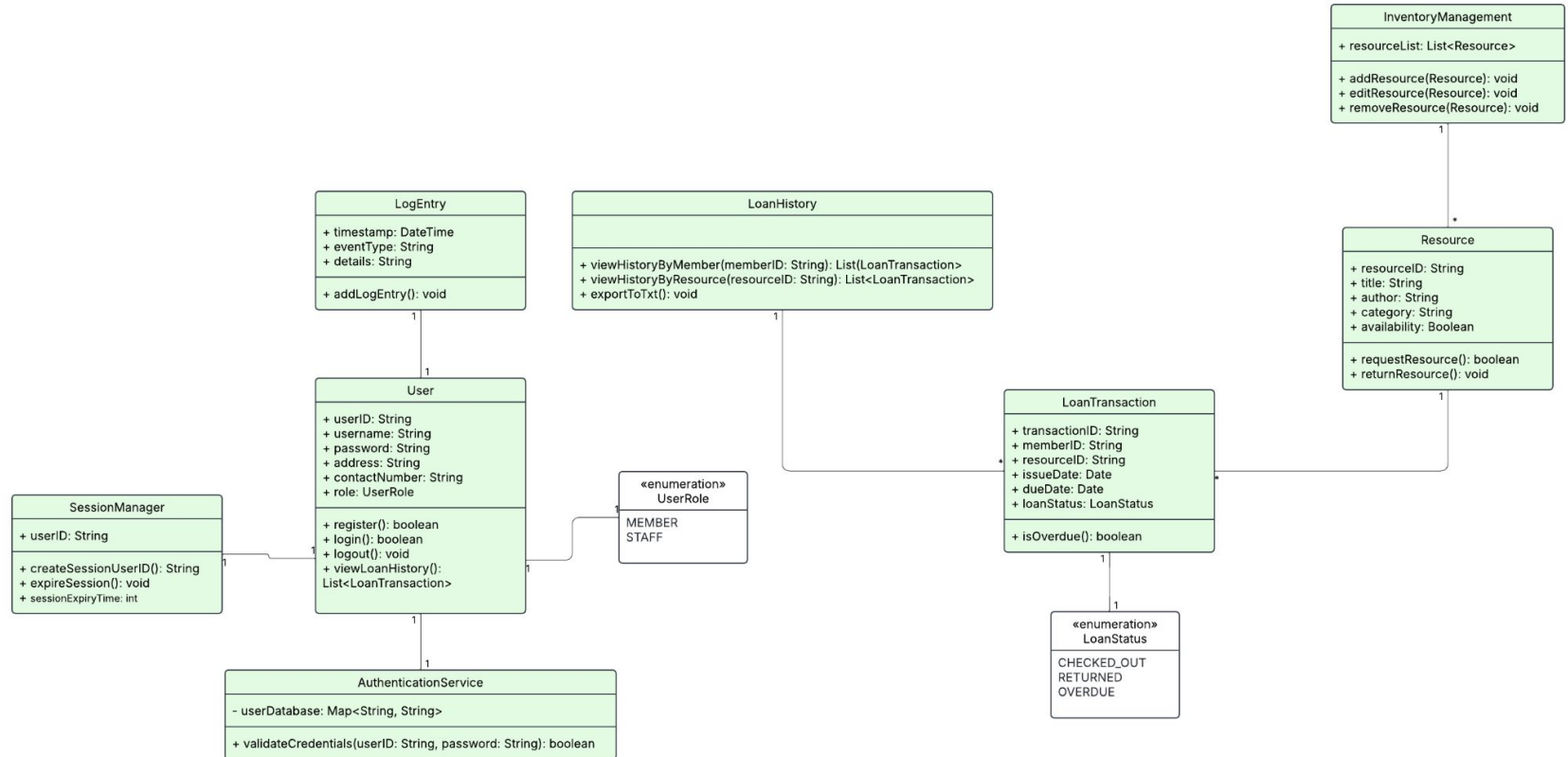
Thomas Tran

Kartik Tripathi (KT)

# Phase 2 Overview

- Recap of Phase 1:
  - Outlined functional & non-functional requirements
  - Designed file-based session & data storage
  - Defined core modules: User, Resource, Transaction, LoanHistory, Inventory
- Additions in Phase 2:
  - Added architectural context to design choices
  - Defined multithreaded client-server model (Staff client GUI, server backend)
  - Introduced message-handling logic with enums
  - Added network communication module
- System Architecture:
  - Client-Server Communication Model
  - Staff (Client GUI) → Server (Request Handling)
  - Use of ClientHandler for multithreaded requests
  - Message object encapsulates data transfer (uses Enums)
  - Stored and retrieved from structured .txt files

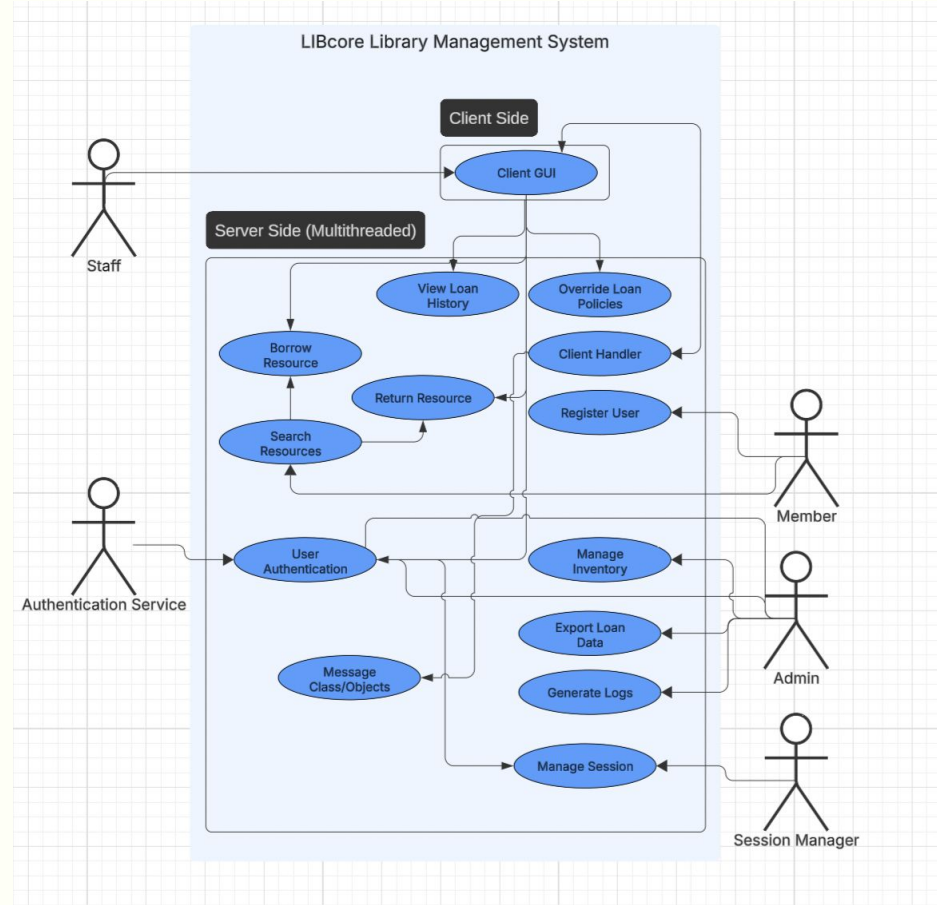
# Class Diagram



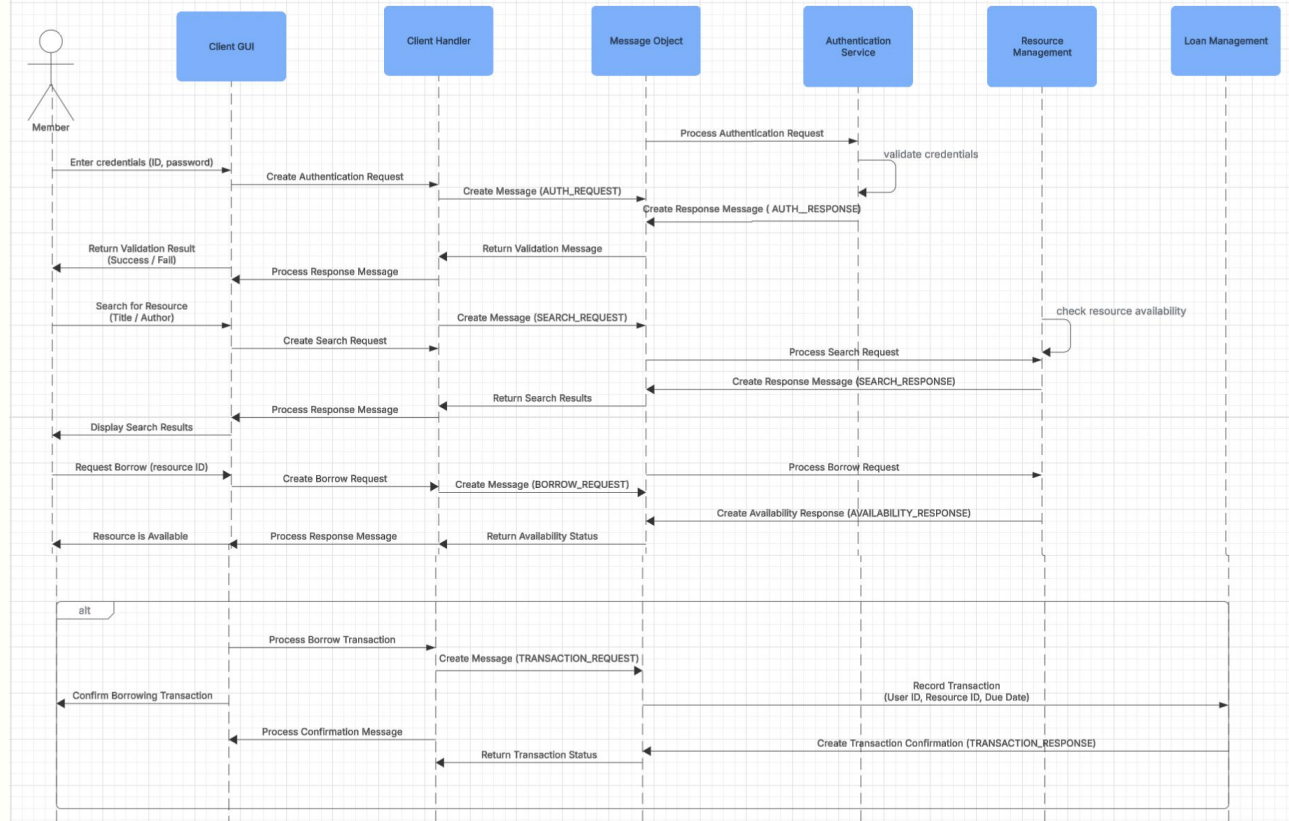
# Use Case Diagram

## What was added:

- Divided the Use Case Diagram into a Client Side & Server Side Components.
- Added Multithreading Context
- Added Client Handler for communication, Between Client & Server



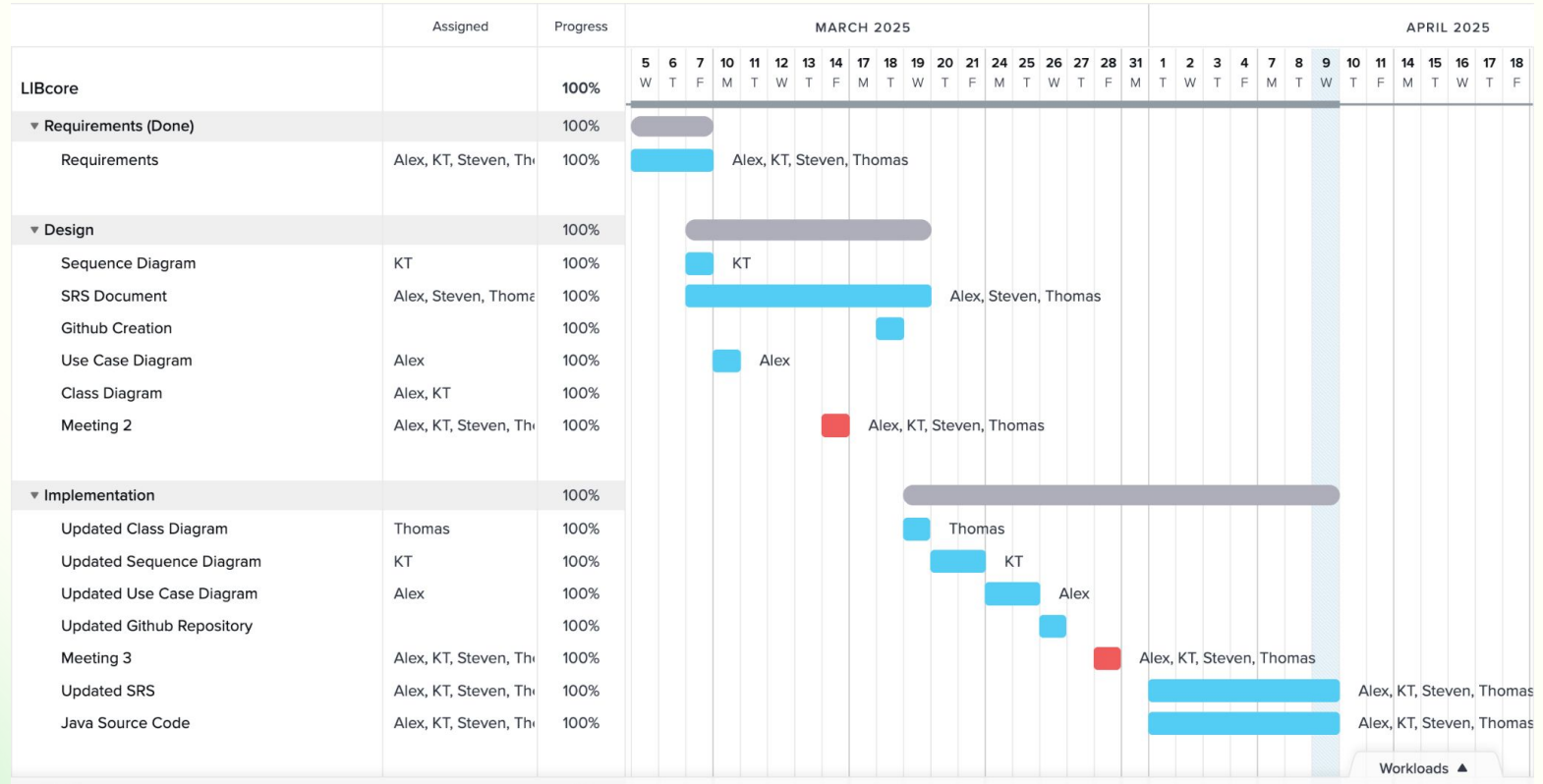
# Sequence Diagram



What was added:

- Added more details to the Sequence Diagram
- Added more actions between modules

# Group Tasks & Workload Schedule





Any Questions or Feedback?

# Thank You!