CSE434

Socket Programming Project

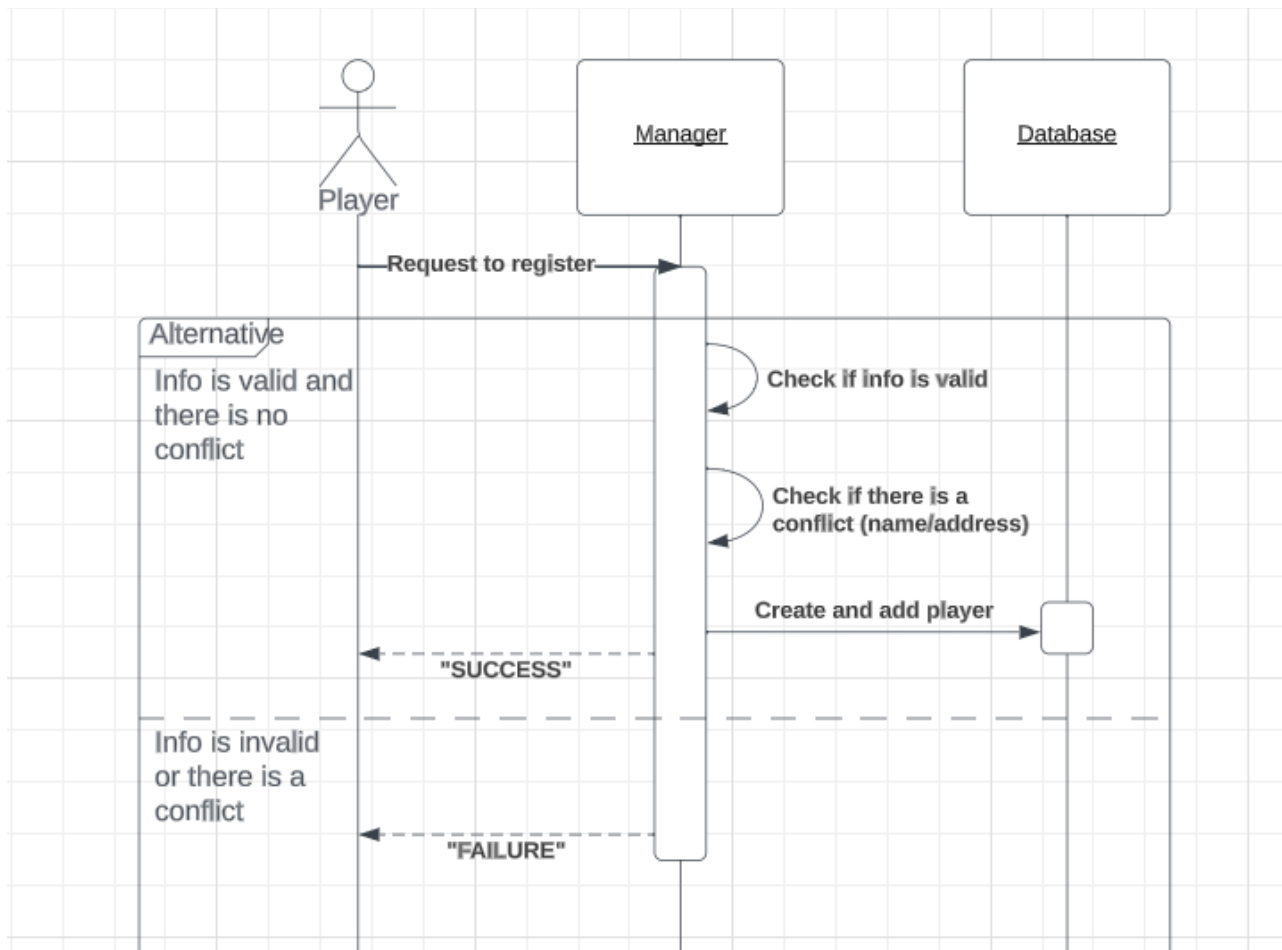# Group 15

Message format

The delimiter between args is '='.
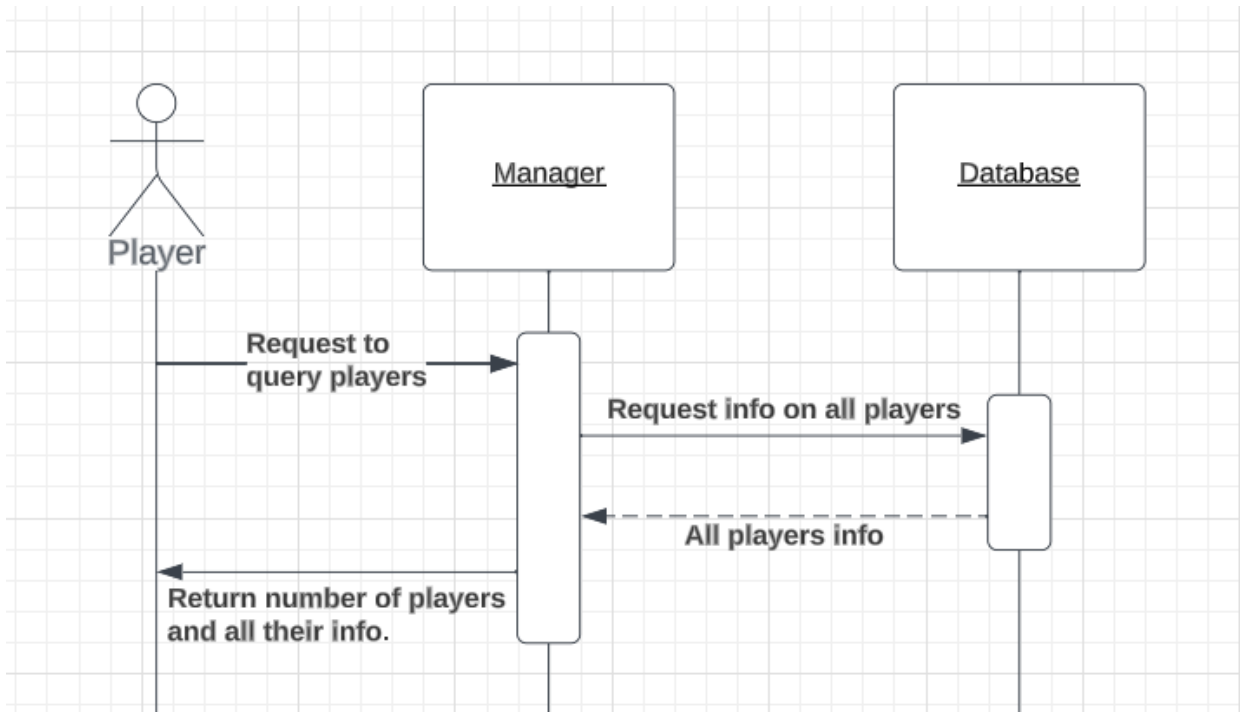
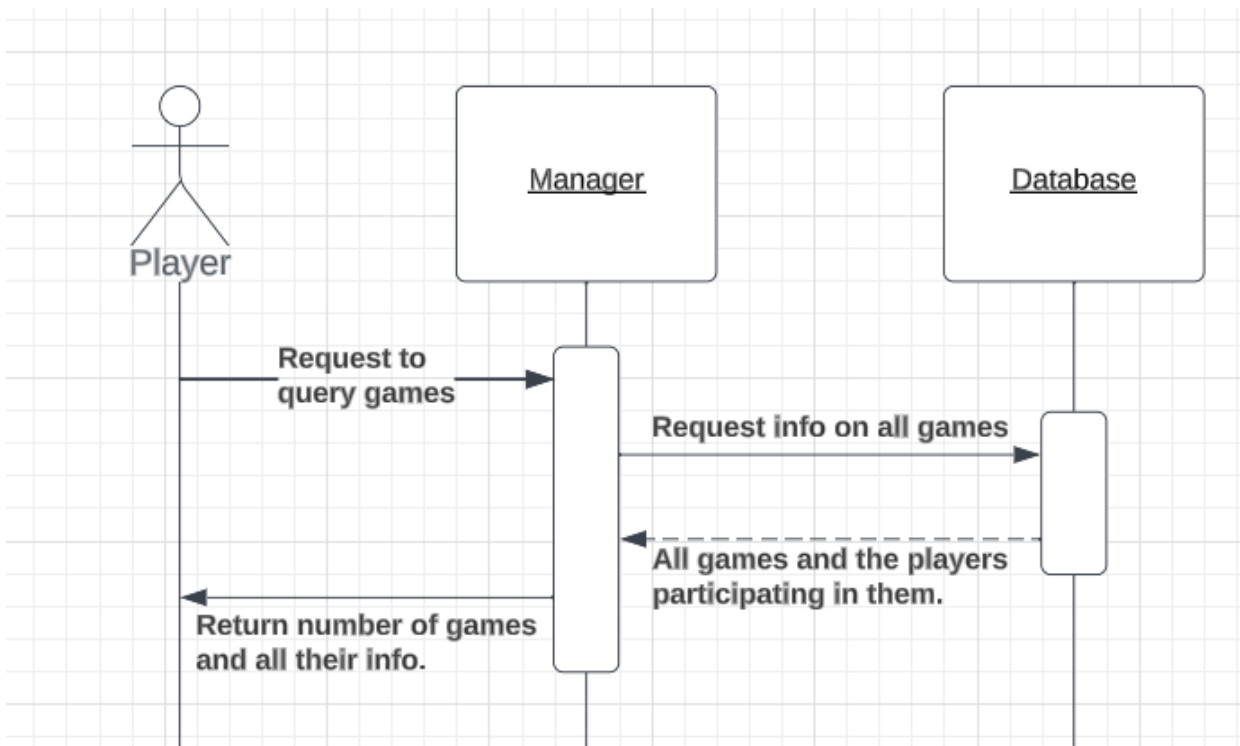| Name of command	1st arg	2nd arg	3rd arg	4th arg	5th arg	6th arg	example
Register	1	Name of user	Their Ip-address	m-port	r-port	p-port	1=Bob=192.168.56.1=70=30=20
Query players	2						2
Query games	3						3
De-register	4	Name of user					4=Bob

Time-space Diagrams
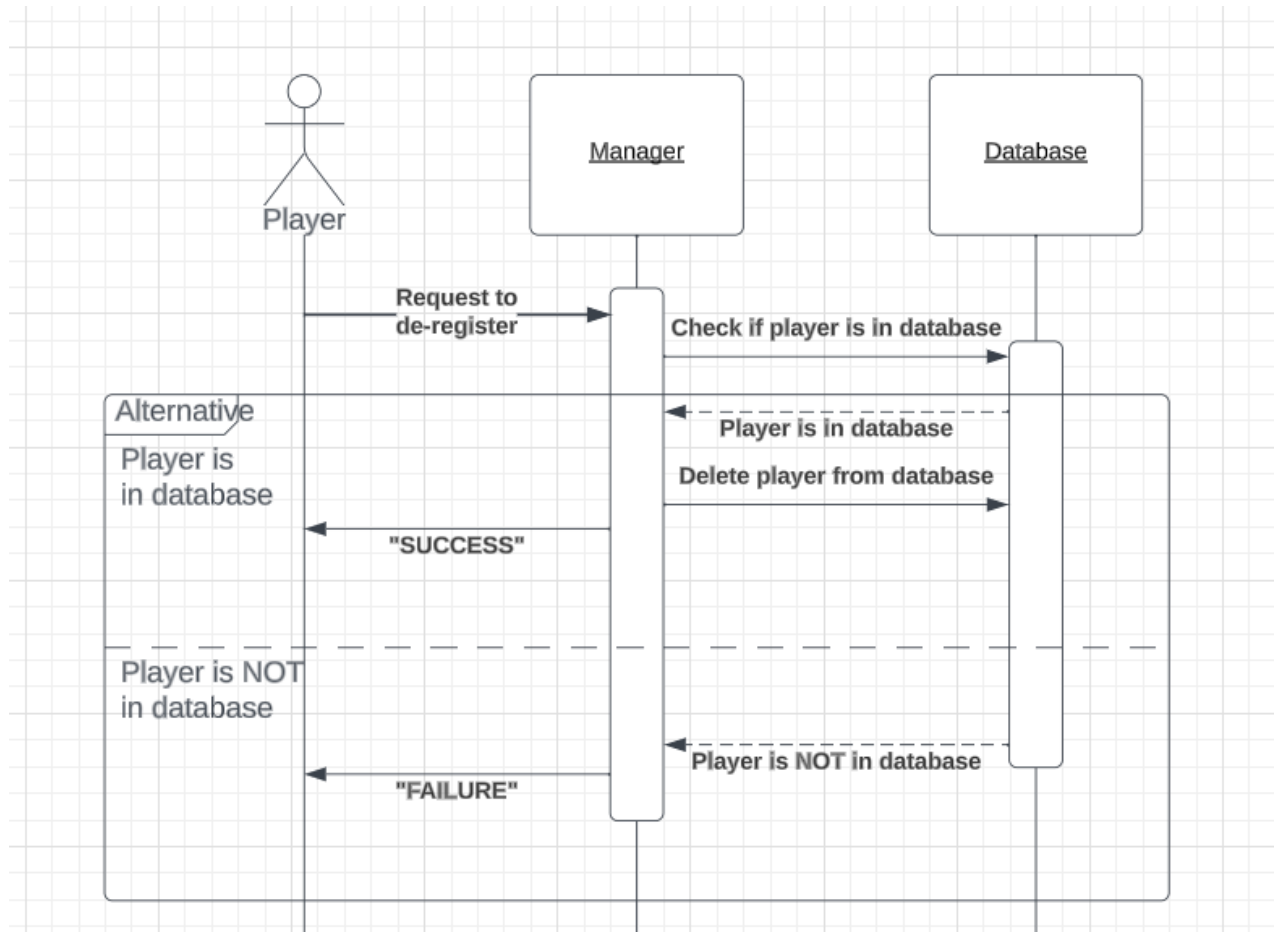
Registration time-space diagram:

Query player:

Query games:

De-register:

Design decisions

1. For the delimeter, we chose "=" because of how uncommon it is in usernames. Allowing users to name themselves with the same username they use on other platforms.

2. As for the data structures used, we went with a standard ArrayList, which is an array that expands automatically once it is full to double its size. This is not the most efficient DS for searching but it is efficient in getting random players to start a game. A better DS would be a binary search tree that is implemented with an array.

Snapshot + link

https://youtu.be/8tnv2LcJ0kQ