

CSE434

Socket Programming Project

Group 15

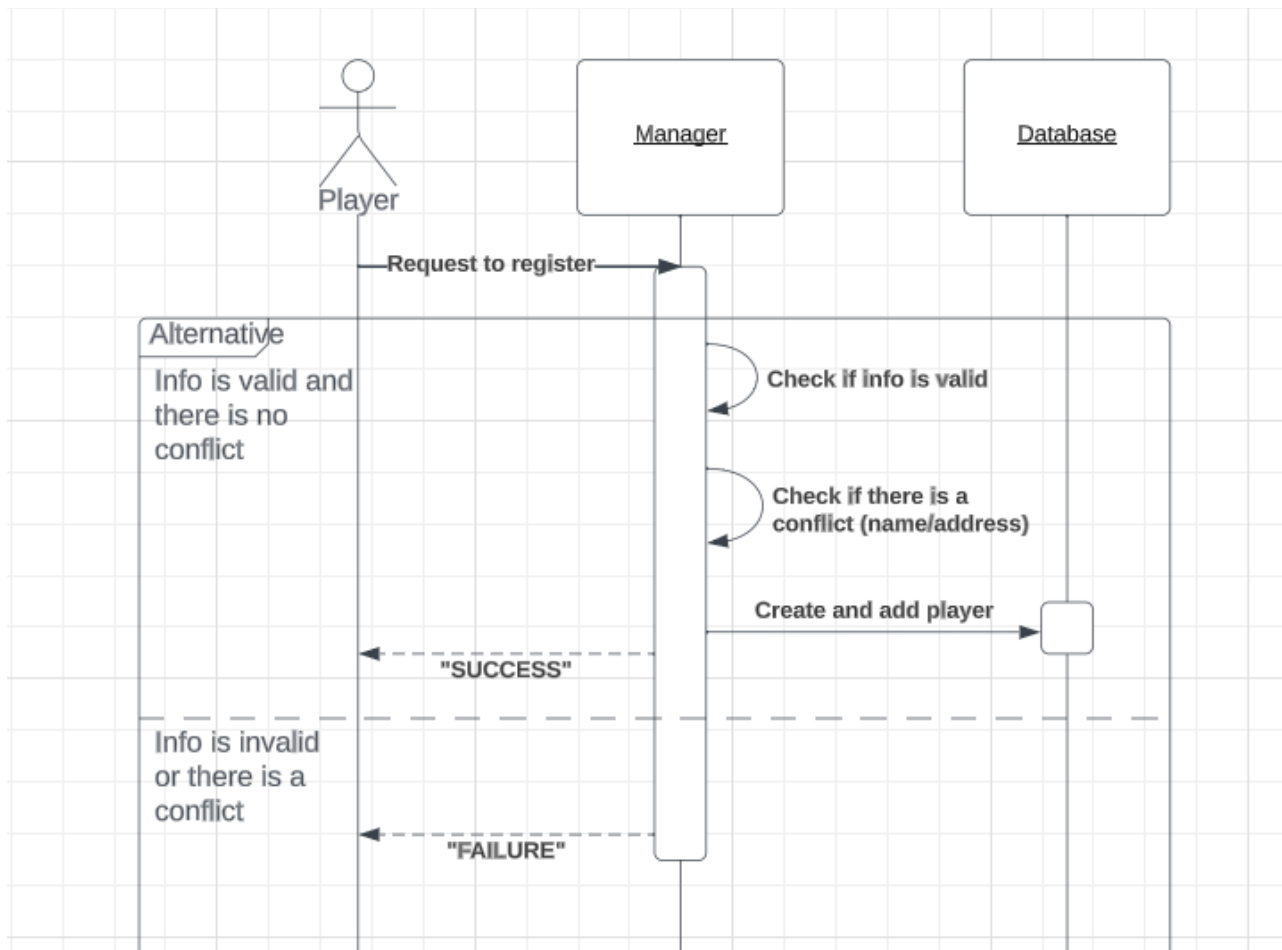
Message format

The delimiter between args is '='.

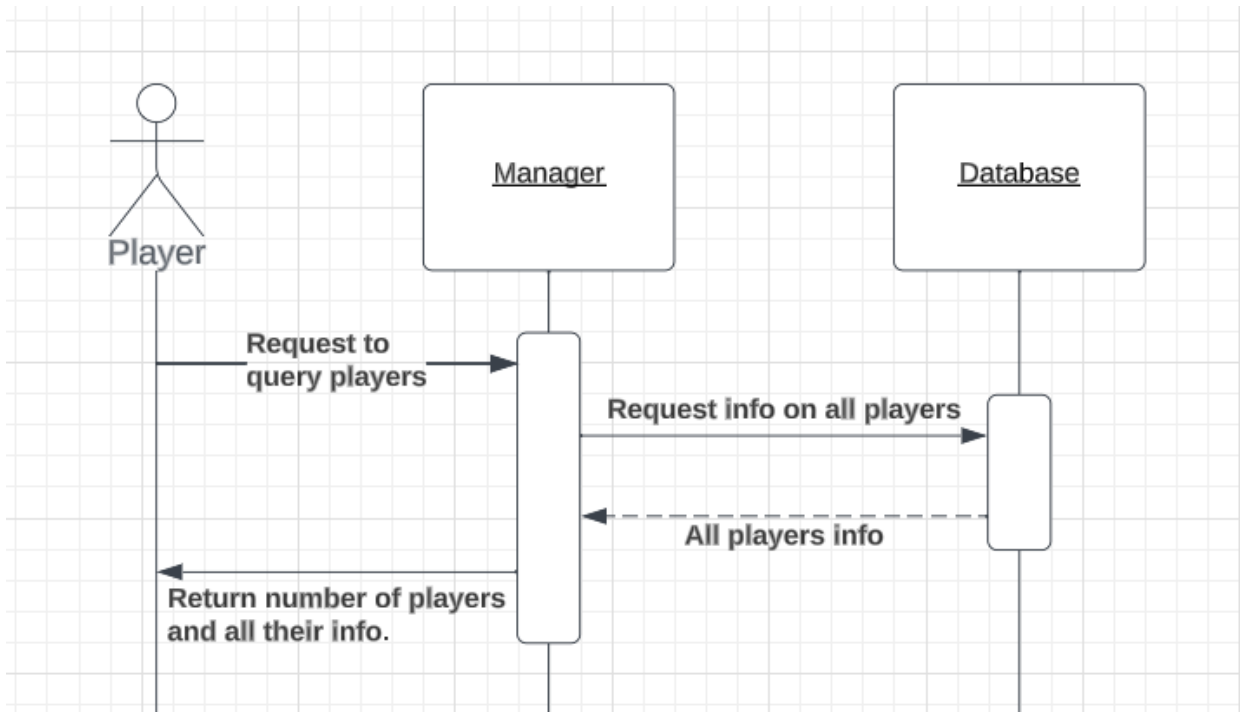
Name of command	1 st arg	2 nd arg	3 rd arg	4 th arg	5 th arg	6 th arg	example
Register	1	Name of user	Their Ip-address	m-port	r-port	p-port	1=Bob=192.168.56.1=70=30=20
Query players	2						2
Query games	3						3
De-register	4	Name of user					4=Bob

Time-space Diagrams

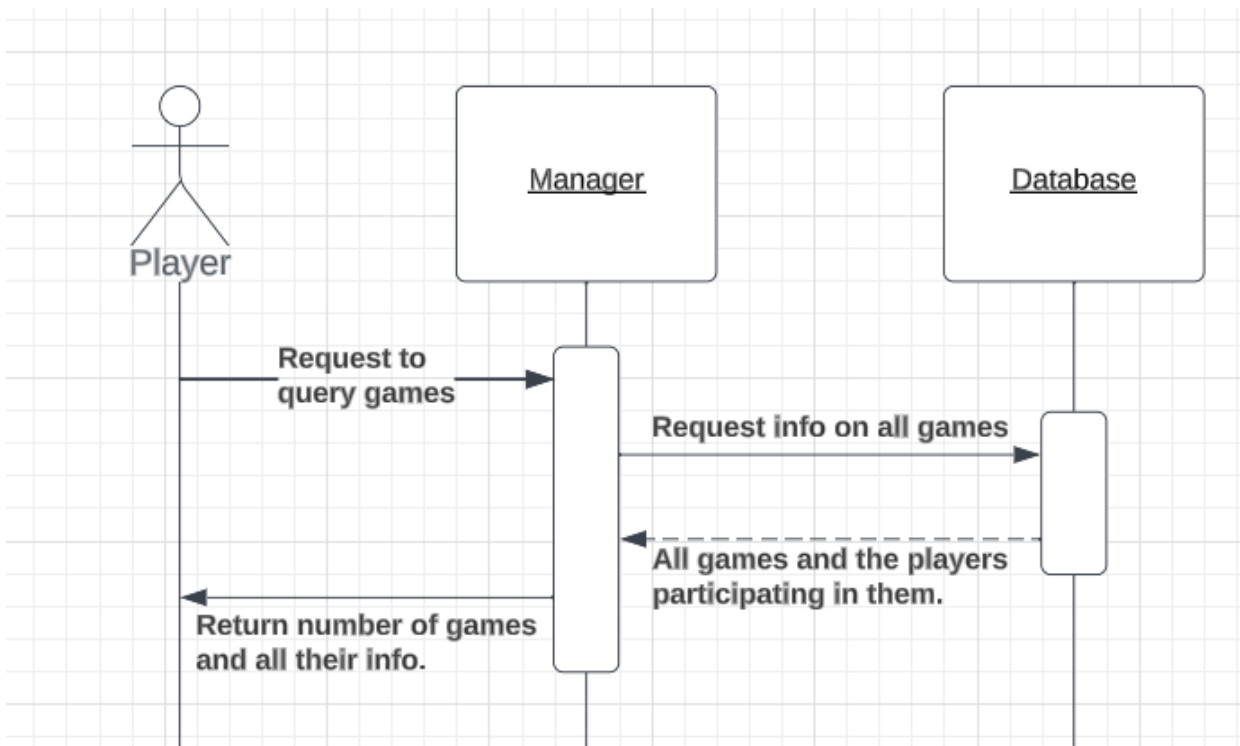
Registration time-space diagram:



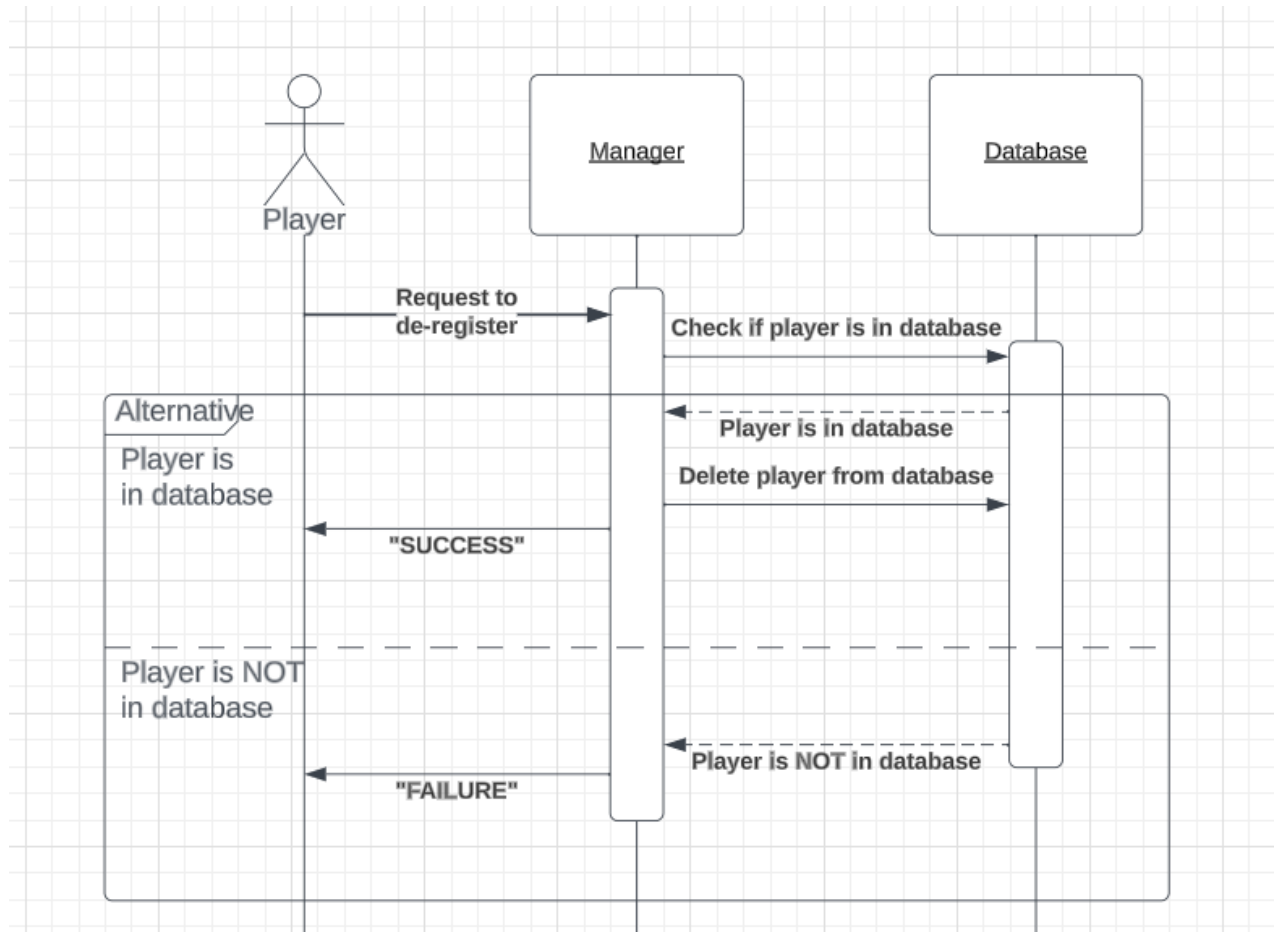
Query player:



Query games:



De-register:



Design decisions

1. For the delimiter, 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>

The screenshot displays a Git commit history on a dark-themed interface. At the top, a dropdown menu shows 'main'. The history is organized by date, with sections for each day from September 19 to September 23, 2023. Each commit entry includes a descriptive message, the author's name, the time since the commit, a copy icon, a hexadecimal hash, and a code icon. The commits are as follows:

- Commits on Sep 23, 2023**
 - Even more polishing. (SamiShuraim, 2 days ago, eb331cf)
- Commits on Sep 22, 2023**
 - More polishing (SamiShuraim, 2 days ago, eec9ae9)
 - Solved some address issues (SamiShuraim, 3 days ago, 568a358)
- Commits on Sep 21, 2023**
 - polishing (Noino27, 3 days ago, 65744e3)
- Commits on Sep 20, 2023**
 - changed how de-register works to match document. (SamiShuraim, 4 days ago, ff0f848)
 - Minor changes (SamiShuraim, 4 days ago, 8ca46ab)
 - put some repeated code into methods. (SamiShuraim, 4 days ago, a486a38)
 - Fixed few minor issues with registration. (SamiShuraim, 4 days ago, 4ecc653)
- Commits on Sep 19, 2023**
 - Flawed implementation of all need methods. (SamiShuraim, 5 days ago, 8e07822)
 - 'Register' implemented on Manager side (SamiShuraim, 5 days ago, c9a35d5)
 - first commit (SamiShuraim, 5 days ago, bf45b2e)