Testing:

-Backend: -junit testing individual components, functions, or methods to ensure they work correctly in isolation.

-Frontend: -cypress testing to simulate real user scenarios and interactions with the application.

-jest testing individual components, functions, or modules in isolation.

-I could write tests with bots 3 libraries.

Perfomance, opportunities to improve:

-Probably the weakness of this small application is the json file "database" which i manually created.

-It could be optimized and changed to a mongoDb or sql database, in that way the repository querys would be much faster.

Osint bottlenecks:

-Resource Intensiveness

-Network Latency

-Data Volume and Processing for big results