

Parallel Computing Big Assignment Proposal

Database Management System

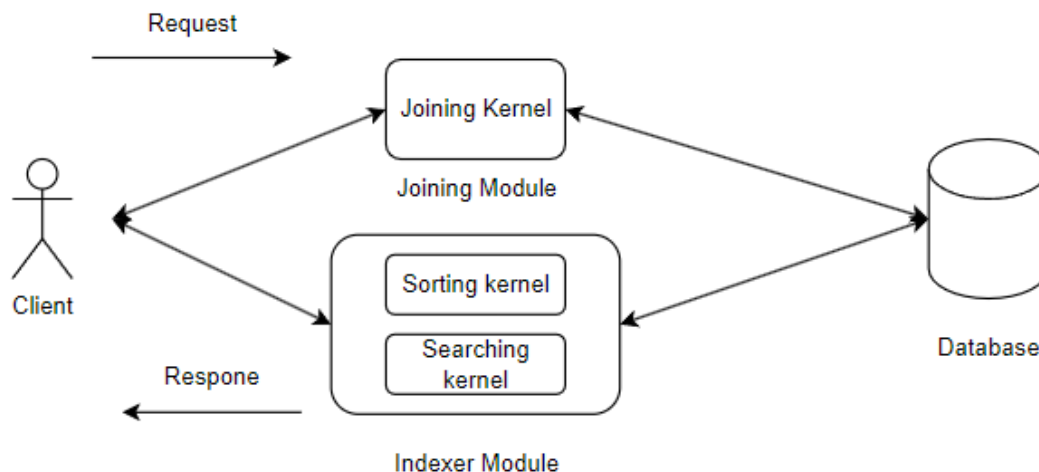
Team Members

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Description:

With CUDA, we can do things like **searching and sorting** data super quickly by breaking tasks into smaller pieces and doing them all at once. This means you can find what you need in your data faster and manipulate it more easily. We're also using **CUDA** to make joining data from different parts of the **database** much quicker. Joining is like putting together pieces of a puzzle to get a bigger picture. By using CUDA, we can spread out the work across lots of different parts of your computer's graphics card, so it's done in a fraction of the time, even when dealing with really big sets of data. Here we go, this sums up our proposal. We are going to implement a system that prompts the user for input to choose from different **operations** they can carry on the database. The kernels will be the brain of the application where there'll be a kernel for each operation to interact with the database and retrieve data in the most parallelized and efficient way.

Block Diagram:



Expected Workload:

Abdelrahman Hamdy	Abdelrahman Noaman
Joining Kernel	Searching Kernel
Main Function (Pipeline)	Sorting Kernel