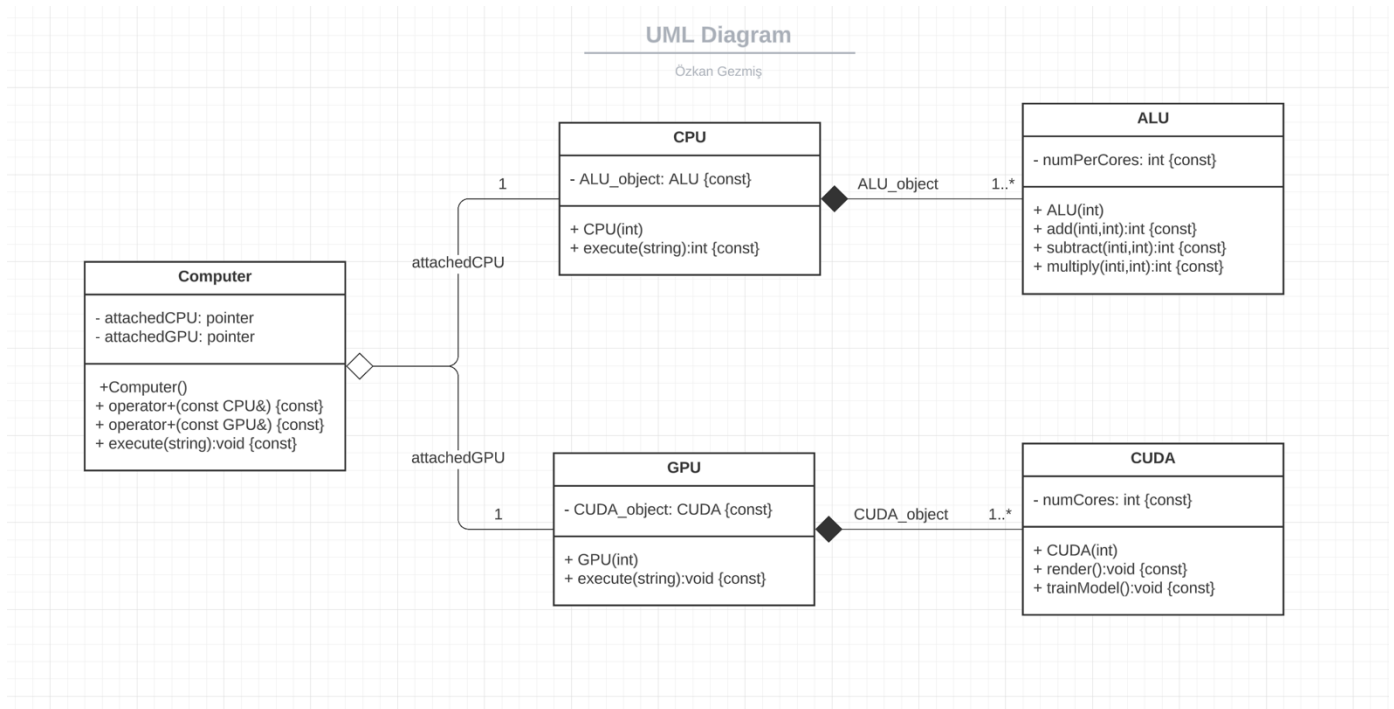Student Name: Özkan Gezmiş
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BLG 252E ASSIGNMENT 2

Part 3 - Report

UML class diagram

- Computer has a CPU and GPU. Each object has its own life cycle; however, Computer is owner. When Computer is created, initially attachedCPU and attachedGPU pointers are NULLs. We connect them later. Also, the CPU and GPU objects may remain when the Computer object is gone. **Therefore, relation between Computer object and CPU, GPU objects is aggregation.**

- **Relations between GPU-CUDA and CPU-ALU is composition,** since the CPU is composed of ALU and the GPU is composed of CUDA. If CPU and GPU object is created, then automatically ALU and CUDA object will be created and if CPU and GPU are destructed, ALU and CUDA will be destructed also. Hence, their lifetime is tied.

- Computer object has attachedCPU and attachedGPU. In main, we send CPU and GPU objects to the operator+ function, so that CPU and GPU are attached to Computer**. In this way, the attribute visibility is established.**