# Readme

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#### Help Received:

We received help from GitHub Copilot and the TA, Ayman Sandouk.

#### Longest Routine:

The longest routine on our UM is our map operation. This operation takes approximately 22% of our total runtime.

Assembly surrounding vector methods and memory allocation with operations like "new", "push", and "clone" could potentially be made faster with multithreading.

Assembly code could be improved through optimizing memory access patterns. Memory Access would ideally be accessed in a predictable, much more linear fashion.

### **Analyzing Hours:**

3 Hours

## Working Hours:

6 Hours