

Homework 8 Report

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Abstract—This report summarizes work performed for HW 8 in Class XYZ.

I. INTRODUCTION

Here is a quick summary of what was done on this homework assignment. We started by writing code to perform some matrix operation on vectors \vec{a} and \vec{b} . We defined the *dot* operation

$$\vec{a} \cdot \vec{b} = \sum_{i=0}^2 a_i b_i = a_0 b_0 + a_1 b_1 + a_2 b_2 \quad (1)$$

We also defined the *mag* operation,

$$|\vec{a}| = \sqrt{\vec{a} \cdot \vec{a}} \quad (2)$$

The equation shown in 2 is coded up as

```
friend double mag(const _vec3<T>&a) {
    return sqrt(dot(a,a));
}
```

II. SOURCE CONTROL

We setup a Github repo, as shown in Figure 1.

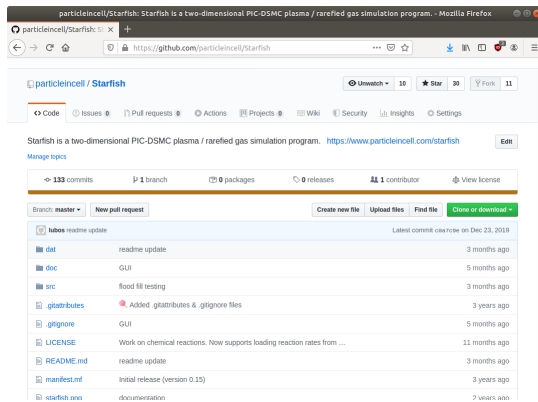


Fig. 1. Screenshot of the brand new Github repo

We also learned how to use Doxygen, Google Test, and \LaTeX . These tools are summarized in Table I. Article by A. Somebody provides a good overview [1] of these tools.

III. CONCLUSION

There was no programming in this homework so it was very easy!

ACKNOWLEDGMENT

I took advantage of the professor's office hour for help on this assignment.

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TABLE I
SUMMARY OF TECHNOLOGIES

Technology	Use
Doxygen	Developer guide documentation system
GTest	Unit Testing for C++
Github	Source Control Repository
LaTeX	Technical paper writing language

REFERENCES

- [1] A. Somebody, "Some title," *Journal of Scientific Computing*, vol. 10, no. 456, 2020.