CSC-578B Project Proposal

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I. MOTIVATION

1) We agree with authors' motivation in [1] (developers should understand attributes that correspond to long lasting projects). Therefore we want to see if the study was credible and if there were any gaps in the study.
2) We want to see if there are any differences between the Bayesian approach and the methods used in the paper. Do they both find the same thing?
3) If we have time, we would like to see if there are other attributes that can predict longevity of a project (or maybe test other threshold values)

II. MATERIALS AND METHODS

1) We will follow the methods outlined [1] for the replication portion of our study.
2) In the comparison portion of our study we will take a Bayesian approach to survival analysis as outlined in [2]

III. LIMITATIONS

[Derek: I feel like we need to brainstorm some limitations because I am at a loss]

IV. EXPECTED RESULTS

We expect to find similar results to that of [1] using the same method. We will then compare the results of the Bayesian approach to those of our replication.

REFERENCES

[1] R. H. Ali, C. Parlett-Pelleriti, and E. Linstead, "Cheating death: A statistical survival analysis of publicly available python projects," in *Proceedings of the 17th International Conference on Mining Software Repositories*, 2020, pp. 6–10.

[2] R. Kelter, "Bayesian survival analysis in stan for improved measuring of uncertainty in parameter estimates," *Measurement: Interdisciplinary Research and Perspectives*, vol. 18, no. 2, pp. 101–109, 2020.