

Review of Simple Object Storage

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Strong Parts

The purpose of this project is to implement a simple object storage system as a practical learning experience. The main idea is to create a working example of an object storage system that addresses fundamental challenges such as consistency, scalability, and performance. The project aims to gain knowledge in distributed object storage systems and practice computer science and software engineering principles. The project will be evaluated through a final demonstration of the functional system, its features, and performance, potentially comparing it to existing open-source solutions.

From the introduction of the project, this is clearly a topic of interest for the author and will motivate a great deal of curiosity and ideas. The proposal clearly states the goal of implementing a simple object storage system and outlines the educational gain of practical experience in working on distributed object storage systems and how there are fundamental challenges and problems associated with such systems.

There are also specific midterm and final goals set, including the completion of system design and architecture, as well as the implementation of core functionalities like creating and retrieving objects. These milestones provide a checkpoint for the project's progress and indicate some thought was put into the approach. Further, the proposal identifies potential challenges and risks that may arise during the project, such as technical implementation difficulties, ensuring data consistency, and potential delays in project completion. This highlights that the author has done enough research to be aware of some of the potential obstacles and difficulties.

To Be Improved

Simple Object Storage is an interesting project idea, however, there are a few different critiques that I have found in the submitted proposal that would be good to consider while working on the project. The main concern is the lack of justification for why a new simple object storage system is needed or how it will be beneficial. It only mentions that the system is used in various applications but does not explain why it is important to create another implementation outside of the one's that already exist. There needs to be more emphasis on what makes this project unique or novel from existing implementations and therefore it is essential to identify the features and limitations of current solutions to understand how the proposed system could differentiate itself.

Additionally, the proposal suggests evaluating the performance of the system and potentially comparing it to other existing open-source solutions. This implies that the project may aim to benchmark the proposed system against existing implementations, which could help identify areas of improvement or validate its performance in comparison to established solutions. As mentioned earlier, this would be easier if there is a prior identification of issues in current solutions that are trying to be improved in the new solution.

The project proposal does not address the likelihood of being able to finish within the given time frame so it would be a good idea to layout a more specific framework on how the project will be approached and worked on to ensure that it is doable due to the complexity of implementing a distributed object storage system. This also ties in with the lack of technical details in the approach. As it is still early

on it is understandable that there might not be a definite approach, but it would be easier to see what is planned if the tools that are going to be used were mentioned. Even if these tools are not what are used by the final demonstration, it is better to research and figure out options earlier on rather than later when time is of the essence to finish.

Next, the proposal mainly focuses on the individual benefits of the author doing the project. It would be beneficial to mention something along the line of showing why this project is important to do for this field such as future collaboration opportunities with other researchers or developers in the field or potential plans for contributing the implementation as open-source software. Widening the net on the importance of the project helps give it importance past personal knowledge development which could turn into a larger opportunity if done well.

Overall, the proposal needs more clarity, specificity, and explanations of the existing solutions and challenges in object storage systems. Providing more technical details, clear goals, and a realistic timeframe will help strengthen the proposal and demonstrate a comprehensive understanding of the project's scope and objectives.