**Description**

Essentially, debased is going to function as a distributed decentralized database system. The issue that debased is trying to solve is security from data lose, malicious users, and the idea of mutual distrust while providing a feasible solution to CAP theorem. Debased pull influence from the Ethereum Engine and streamlines their implementation to better serve maintaining database infrastructure. Ethereum is also a decentralized platform that attempts to allow systems to communicate to each other without downtime or interference. Ethereum utilizes blockchain technology to scale on a global level.

The target end user would be businesses developing services meant to be shared amount their customers. By using debased, businesses would be able to guarantee the highest level of security, consistency, and availability to their customers. Debased removes the need to trust first, second, or third-party solutions. Instead, debase places trust in the consensus of the nodes in order to make these guarantees.

An example of using a properly setup debase system would require a user to interface using modified SQL syntax. Once the request is received by debased, each participating node reaches consensus on if the request should be approved. If majority is achieved, the debase system will fulfill the request of the initial user.

The hardware and software requirements for a node in debased is to have at least some running server capable of communication over the web and using the most up to date debased software. The requirements for a user in debased is to have an active debased account and some system capable of making SQL requests.

**Justification**

In order to develop debased, it will require a proficient level of knowledge in the respective courses: Data Structures, Operating Systems, Mutual Distrust Cloud Systems, Programming Languages, Systems Programming, and Database Systems. Not only that, but it will require the participants to conduct extensive research on decentralized systems, blockchain, cloud programming, secure message passing, cryptography and distributed systems.

The tools required to build debased are some kind of machine capable of running modern operating systems such as Windows, macOS, and Linux. On these machines, they should be capable of running modern programming languages and other software required to implement decentralized systems.

The participants have a strong interest in the idea of democratizing database systems. Following that, they also want to build on existing decentralized systems and bringing these benefits to the mainstream by lowering barrier to entry and simplifying the interface. This kind of work in becoming more and more relevant in modern high-tech industry and will give the participants unique skillsets to differentiate themselves from the crowd.