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**College of Engineering - Department of Electrical Engineering**

***CpE 430: CpE Practice and Design 2***

**Capstone Project Title:**

**Enhancing File Sharing and Data Management Capabilities at Batangas State University  
Alangilan Faculty Through a Distributed File System**

**Members:** Abad, Jemilyn L.

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**RESEARCH OBJECTIVES:**

Design and implementation of a distributed file system that will allow the faculty members to upload, download, share, and synchronize files across different devices, using a decentralized network of peers and improve the efficiency and security of data transmission of Batangas State University Alangilan. The objectives are to, specifically:

1. To design and develop a user-friendly interface for the distributed file system that enables faculty members to easily upload, download, share, and synchronize files across different devices.
2. To implement a network architecture using a Server - Client model that allows faculty members to be connected to the web application and be included to the Distributed File System.
3. To implement data redundancy and integrity assurance through a Network File System protocol to enhance data resilience and accessibility.
4. To implement search and indexing functionalities, enabling faculty members to efficiently locate and retrieve specific files within the distributed file system.

Approved by:

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***Dr. Jeffrey Sarmiento***  
***Panel Chairman***

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***Dr. Jen Aldwayne Delmo***  
***Panel Member***

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***Engr. Mark John Fel Rayos***  
***Panel Member***