

SPL-1 Project Proposal Form, 2023
Institute of Information Technology (IIT)
University of Dhaka

Student's Name:	Sumaiya Farhana Islam		
Student's Roll:	1450	Phone:	01581506436
<p>Project Description:</p> <p style="text-align: center;"><u>Deduplicate the File</u></p> <p>"Deduplicate the File" is a file manager-based project with the aim of identifying and removing duplicate files from storage devices.</p> <p>This project helps to free up unused space and reduce storage costs. The program takes storage path as input and accesses the storage to create metadata, such as the File Control Block (FCB), for all files in the directory. It then traverses the storage device, calculates metadata for each file, and checks if the FCB already exists. If so, it compares the content of the file with another file having a similar FCB. If the contents become similar, it identifies the file as a duplicate and keeps a single copy, replacing duplicates with symbolic links or file shortcuts using Linux File Manager.</p> <p>The "Deduplicate the File" project efficiently identifies and removes duplicate files from storage devices. By creating metadata like the FCB for each file, it organizes data effectively, enabling faster backup and restore processes, and enhancing data security. Using symbolic links, the project simplifies file management, and contributes to a more environmentally-friendly storage approach. Scalable and performance-driven, this project optimizes storage usage, offering practical benefits for individuals and organizations managing large amounts of data.</p>			
<p>Languages or Tools to be used: C, C++, Visual Studio Code, Git, GitHub</p>			
<p>Supervisor's Name: Dr. B M Mainul Hossain</p> <p>Signature of the supervisor: _____</p> <p>Date:</p>			

Before the Midterm Presentation:

I confirm that the progress is satisfactory and I am forwarding it for midterm presentation.

Signature of the supervisor: _____

Date: _____

Midterm Presentation Feedback: