**SPL1 Project Proposal Form, 2022**

**Institute of Information Technology (IIT)**

**University of Dhaka**

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| **Student’s Name:** | **Nusrat Jahan Lia** | | |
| **Student’s Roll:** | **1306** | **Phone:** | **01580841493** |
| **Project Description:**  A Blockchain system created from scratch using C++. The Blockchain will include all the properties of a mainstream blockchain, featuring public key cryptography, hashing, transactions, block creation, and a proof-of-work implementation. The key technical implementations of my project are:   * Hashing algorithms (SHA-256), which are used to generate a unique hash for each block based on its data and the previous block's hash. * Public-key cryptography (ECC-Elliptic Curve Cryptography), which is used to secure the communication between participants in the blockchain and to verify the identity of participants. * Consensus algorithms, Proof of Work (PoW), which is used to ensure that all participants agree on the state of the chain and to prevent malicious actors from manipulating the chain. | | | |
| **Languages or Tools to be used: C++** | | | |
| **Supervisor’s Name: Dr. Ahmedul Kabir**  **Signature of the supervisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | |