**SPL1 Project Proposal Form, 2022**

**Institute of Information Technology (IIT)**

**University of Dhaka**

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| **Student’s Name:** | **Mosamma Sultana Trina** | | |
| **Student’s Roll:** | **BSSE-1313** | **Phone:** | **01938908632** |
| **Project Description:**  **Abstract Syntax Tree**  The goal of this project is to build **Abstract Syntax Tree (AST) for C Source Code.** The AST will be a tree-like structure that represents the syntactic structure of the source code in a way that is easy to understand and manipulate. The Abstract Syntax Tree will include (Basic for loop, while loop, if-else statement).  Project Objectives:  1. Perform **lexical analysis** on the source code to break it down into a sequence of tokens  2. Construct a **parse tree** that represents the **syntactic structure** of the source code  3. Build the Abstract Syntax Tree (AST) from the parse tree. | | | |
| **Languages or Tools to be used:**  C, C++, Visual Studio Code, CodeBlocks, Git, Github | | | |
| **Supervisor’s Name: Dr. Sumon Ahmed**  **Signature of the supervisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: 04 January, 2023** | | | |