


SPL1 Project Proposal Form, 2022
Institute of Information Technology (IIT)
University of Dhaka

Student's Name:	Swadhin Pal		
Student's Roll:	1302	Phone:	01319722861
Project Description: The aim of this project, named CodeToImage, is to generate a corresponding image vector file of a source code. This will open developing new applications on software engineering, inspired by image processing such as identifying similar codes by comparing image vectors. The program will take C source code as input. First task is to build a Control Dependency Graph (CDG) (execution sequence of code statements) and a Data Dependency Graph (DDG) (inter-statement dependency based on variables) using the inputted source code. Then we will merge the CDG and DDG to create a Program Dependency Graph (PDG) . PDG will be required to build the Centrality vector (how a node of a graph is connected to other nodes of that graph). Next Sentence Embedding (storing the information of a sentence/statement into a vector) will be done from each line of source code. The output of Sentence Embedding will be another vector. Finally, from scalar multiplication of embedded vector and centrality vector the Image vector would be generated.			
Languages or Tools to be used: C, C++, Visual Studio, Git, Github			
Supervisor's Name: Prof. Kazi Muheymin-Us-Sakib Signature of the supervisor: 			
Date: 03 January 2023			