**SPL1 Project Proposal Form, 2022**

**Institute of Information Technology (IIT)**

**University of Dhaka**

| **Student’s Name:** | **Rony Majumder** | | |
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| **Student’s Roll:** | **BSSE-1325** | **Phone:** | **01581509488** |
| **Project Description:**  **Topic Modeling using**  **Non-negative Matrix Factorization**  In NLP (natural language processing),a topic model is a type of statistical model for discovering the abstract “topic” that occurs in a collection of documents. It is an unsupervised approach used for finding and observing a bunch of words (called “topics”) in a large cluster of texts.  In this project, Bengali text will be encoding with ML language and uses a group of linear algorithms, Non-negative Matrix Factorization, to reduce the dimension of input corpora or corpora.  Here I will work on Bengali Language as text and hopefully this project provides users with methods to organize, understand and summarize large collections of textual information. | | | |
| **Languages or Tools to be used: C++** | | | |
| **Supervisor’s Name: Professor Mohd. Zulfiquar Hafiz**  **Signature of the supervisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: 4 January, 2023** | | | |