Project Planning and Report

Members :
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Project Description:

In this Course (CNT5106C) we are implementing BitTorrent . BitTorrent is a popular P2P protocol for file distribution. We are also implementing the choking-unchoking mechanism which is one of the most important features of BitTorrent.We are implementing the code in Java and we are using eclipse Mars as development tool

Work Divide :

The whole task for this project is equally divided among the peer members and with a deadline to finish their respective tasks.The tasks has been divided in the following way as of now :

Member Name	**Task**	**Percentage**
Varun Kumar	-Understanding the Project Description -Do the task of Initial configuration Setup from the file , Logging Mechanism and opening sockets for setting TCP connection with other peers	33.33
Shashank Ranjan	-Understanding the Project Description - Handling message transfers with neighbour peers for file download ,Designing the Data Structures to be used for storing file and peer information	33.33
Sarath Francis	-Understanding the Project Description -Handling message transfers with other peers, -Handling logic for choosing preferred neighbours ,choking and unchoking behaviour	33.33

NOTE : Tasks have been divided based on the team member interest .We have collectively taken important decisions like understanding of the project ,how the peer should be initialised and what are the data structures to be used .

Project Status :

- Uptil now we have finalised the design of the project and what are the data structures to be used.
- We have completed the coding part of Initial system setup ie reading the initial configuration files from the system and storing the information in data structures .
- We have also implemented the Logging mechanism that will be used to log important informations in an output file.
- We have implemented the basic handshake message and Actual message structure that contains all the important informations about the message being sent and received by the peers .
- We have implemented the handling of keeping track of the pieces of the files that are being downloaded from other peers
- We have implemented the File read write operation when a peer gets chunk of file from other peers .
- Handling data types ie Bit,Byte and integers that will be extensively used in this project

Things to Do :

- Start the peer and open the tcp connection with other peers once the reading of configuration files is done .
- Choosing the k preferred neighbours and choking and unchoking decisions .
- Updating the k preferred neighbours after p seconds or based on messages from the peers .
- Handling of Have message.
- Implementing the function that will be used to download the file.
- Gracefully shutting down the system once the file download happens .
- Testing