|  |  |
| --- | --- |
|  | **HASAN KALYONCU UNIVERSITY**  **Computer Engineering Department** **CENG 499 Project Proposal Form** |

**Part I. Project Proposer**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name Lastname** | **Mohammad MADI** | **E-mail** | **mohammed.madi@hku.edu.tr** |
| **Company Information**  **(If you have collaboration with a company)** |  | | |

**Part II. Project Information**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Starting Term** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 2 | 0 | 2 | 1 | / | 2 | 0 | 2 | 2 | |
| **Title of the Project** | Network Bandwidth Management System For Educational Institution |
| **Project Description** | |
| This project investigates the problem of network congestion that happens in most of educational environments. Network congestion can be occued by using high bit rate applications as P2P, video, or online gaming. Such problems cause higher delays and some traffic drops, so a suitable mechanism that manages that congestion with less drops and delays is required.  Develop a system that is remotely monitoring the network and detect the congestion in the network, the system periodically collect data from the network and visualize it, once the congestion occur, the system will detect the traffic that cause the congestion and perform the necessary bandwidth allocation according to the current situation of the network.  Thus this project aims at developing a system wherein the user can execute various commands to control the bandwidth of the network remotely and visualize the network traffic in the realtime. | |
| **Project Justification** | |
| **Novelty** | |
| **New aspects** | This application is useful for network administrator in colleges, company’s etc.  All the applications running on the computers will be monitored by the handheld device |
| **Complexity** | |
| **Challenging problem and issues** | How to keep High Throughput of the system since.  How to Meet the administrator’s requirements and satisfaction, since performing all the functions required administrating the network remotely. |
| **Related computer science fields and subfields** | Computer Networks, Software Engineering |
| **Tools** |  |
| **Risk involved** | |
| **Potential problems and alternative solutions** | System testing and documentation may take longer than expected due to last minute errors in implementation, calibration, and evaluation. So we are planning to perform unit testing as early as possible. |
| **Minimum work required** |  |