**Loughborough universit y**

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| 14ELC004 – Computer Networks |
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| Internet chatting in the TCP/IP network |

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Internet chatting in the TCP/IP network

Introduction

The objective in this coursework was to create an internet based chatting client over TCP/IP and UDP protocols. The two main aspects of this project are the server and client. The code for the server is already written but can be edited it required whereas the client needs modifying to fulfill the project objectives shown below. The programs will be developed using Python 2.7 due to the simplistic interfacing it provides with the networking protocols.

Project Objectives

* Clients must be able to communicate with other clients
* Each client must display a friends List
* Friends List will display the username of each person connected
* Friends List must reflect the online/offline status of each person connected
* Chatlog will display sent messages sent to different clients
* Usernames must be requested via the use of UDP between client

Python Background

Python was first developed about 20 years ago by a Dutch programmer called Gudio van Rossum. It was initially developed as a successor to the ABC programming language but able to interface with the Amoeba operating system. Python’s popularity boomed in 2000 with the release of 2.0 this was aided by the increased usefulness of scripting languages with python being the main alternative to Perl, Ruby on rails was still finding its feet at this point. Python’s easy to read and more relaxed nature to common programming procedures such as initializing and defining variables made it popular with individuals new to programming. The version used in this project is 2.7, released in 2010. Although python is being used to create the Graphical user interface in this project it’s often used instead of PhP to create the functional backend of websites while being fronted by HTML. In the past 10 Years Google has invested a lot in the language for this particular purpose. The Popular video sharing website “YouTube” currently runs on python.