**Project 01 Requirements and Use Cases**

**PhatChat**

**Josephine Lipkin, Justus Flerlage**

**April 26, 2015**

**Table of Contents**

**1.0 Server**

**1.1 Startup**

**1.1.1** server is started by the command line interface

**1.1.2** command line arguments are used to configure the server

**1.1.3** listen port can be set defining the first command line argument

**1.1.4** if the first command line argument is missing the default port is used

**1.1.5** listen hostname or ip address is set automatically to 0.0.0.0

**1.1.6** if the listen port is used the application is terminated

**1.1.7** on a successful startup a success message is printed to the console

**1.2 Running**

**1.2.1** every five seconds the server sends ping packets to all connected clients

**1.2.2** if a client connects a message is printed to the console

**1.2.3** if a clients disconnects a message is printed to the console

**1.2.4** if a packet is received by a client a packet specific message is printed to the console

**2.0 Client**

**2.1 Startup**

**2.1.1** client is started by double clicking to the application symbol or by using the command line argument

**2.1.2** if minimum two command line arguments is provided the client connects to the server with the given arguments

**2.1.3** the first argument defines the username

**2.1.4** the second argument defines the ip address or hostname

**2.1.5** the third argumen can define the port

**2.1.6** if no third argument is provided the default port is used

**2.1.7** if the connection is successful a chat window is displayed

**2.1.8** if the connections fails a connection a connection window is displayed with a error message popping out

**2.1.9** if no command line argument is provided a connection window is displayed

**2.1.10** username textbox, labeled with username, is used to define the username

**2.1.11** address textbox, labeled with address, is used to define the ip address or hostname and port separated by the colon

**2.1.12** the default value of address textbox is 127.0.0.1:20901

**2.1.13** if the connect button is pressed the client tries to connect to the server with the given address

**2.1.14** if the connection is successful a chat window is displayed **2.1.15** if the connection failed a error message pops out

**2.2 Running**

**2.3 Shutdown**