

# IRC CLIENT

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### **Abstract**

Internet Relay Chat (IRC) is the protocol for live interactive internet text messaging or synchronous conferencing. It is mainly designed for group communication in discussion forums called Channels.

### Background

IRC is an open protocol that uses TCP. Users access IRC network by connecting a client to a server. IRC is a plain text protocol and runs on port 6667. IRC has a line base structure with a client sending single line messages to the server and receiving reply to those messages and receiving copies of those messages sent by other clients.

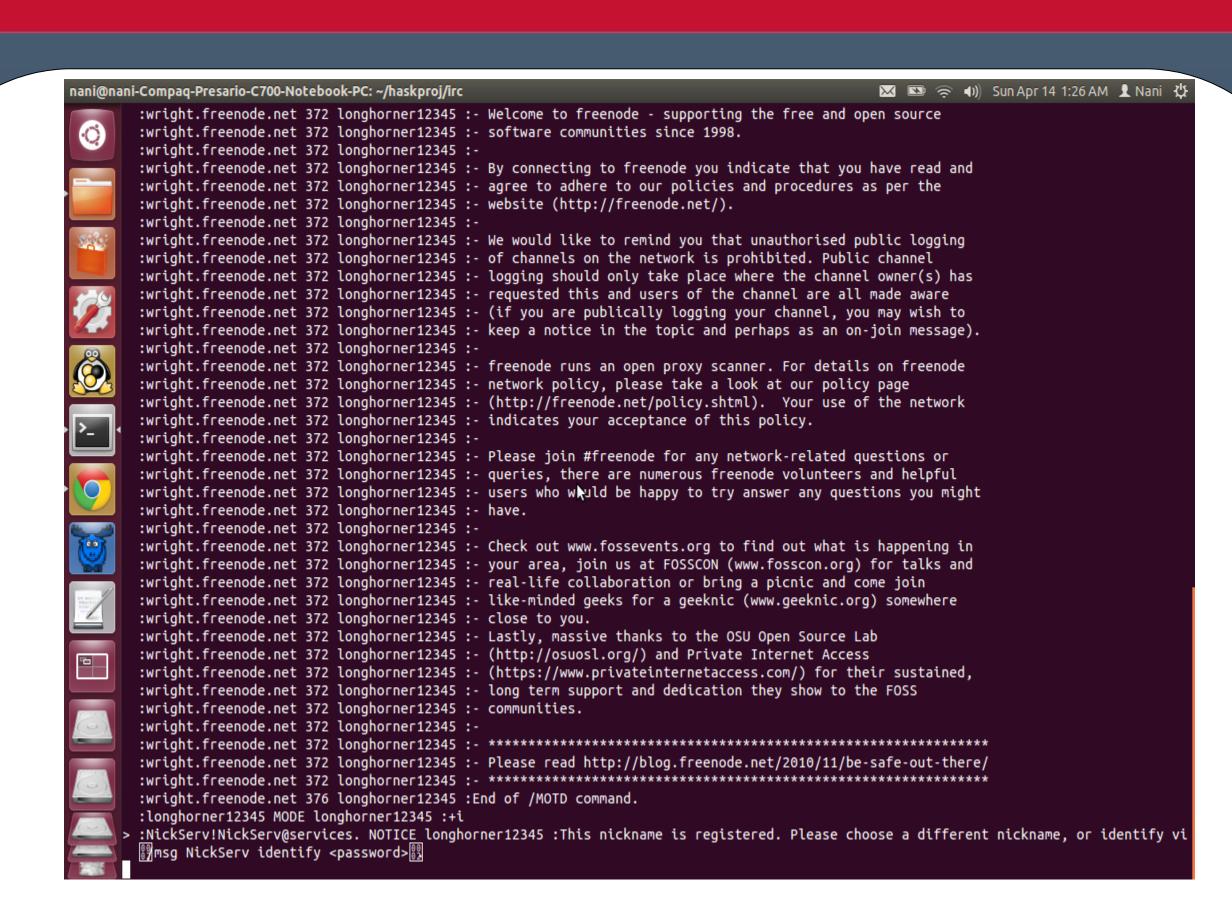
## Implementation

IRC is an open protocol that uses TCP and, optionally, TLS. An IRC server can connect to other IRC servers to expand the IRC network. Users access IRC networks by connecting a client to a server. Most IRC servers do not require users to register an account but a user will have to set a nickname before being connected.

This is implemented by forking a thread for listening from the server and parent thread is dedicated for using user input. The prefix 'Tilde' is used to route commands to IRC server and 'Tildetilde' prefix is used to route the commands to nick server.

Results/Outcomes

An IRC client implemented in Haskell for command line interface with the IRC and nick name server.



Screen shot of IRC Client

### Conclusions/Recommendations

Various aspects of Haskell programming like Concurrent / multi thread programming, socket programming, concept of modules and monads are better understood.

### Acknowledgments

Dr Piyush P Kurur and hundreds of fellow Haskellers for online guidance

### References

Learn you Haskell for great good by Miran Lipovaca Real World Haskell by Brian O Sullivan RFC 2812 www.haskell.org

## Project Goals/Objectives

- Implementation of IRC client in Haskell.
- Simple Command line interface.
- Integration with nick name server.
- Version control using Darcs and packaging using Cabal.