
Ruby Monstas



Session 12

Project: IRC Bot

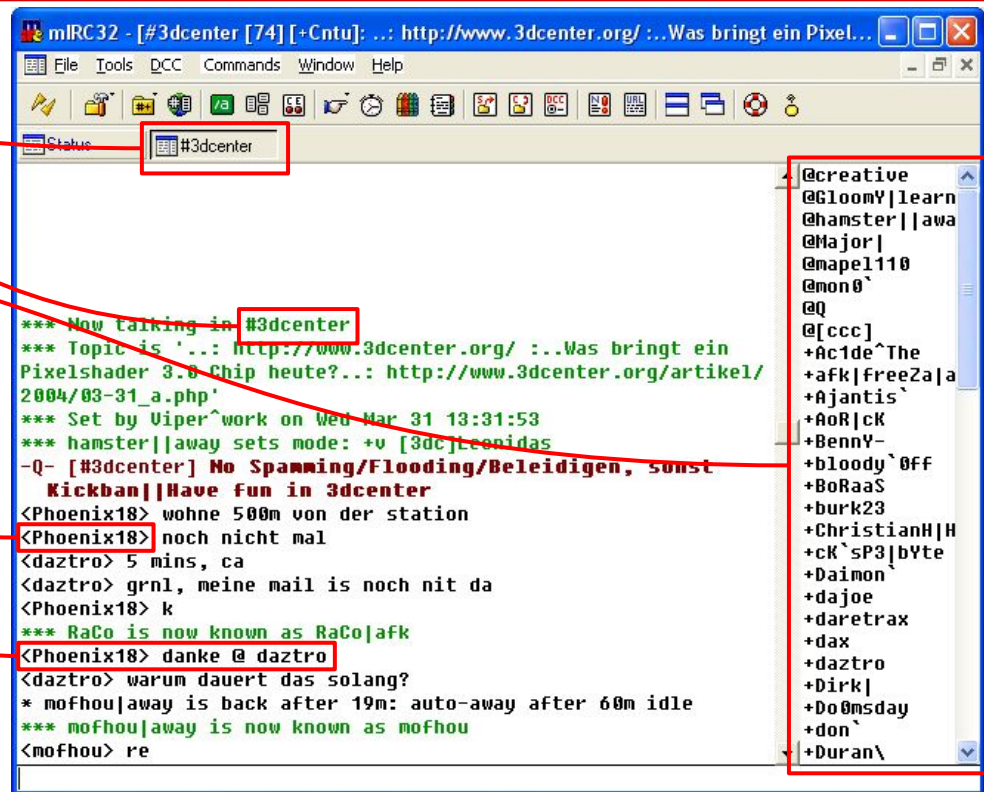
IRC

channel

user list

user

channel message



Client / Server Networking

Client



Internet (the “Cloud”)



Server



Client / Server Networking



TCP connection



IRC Protocol

```
31 # A method that sends an IRC-protocol message to the server and also puts it to the terminal
32 def irc_send(message)
33     puts("Sending: #{message}")
34
35     # We can call "puts" on the socket we opened earlier. Instead of outputting something on the
36     # terminal, this will send the message accross the internet to the IRC server we are connected to
37     @socket.puts(message)
38 end
```

IRC Protocol

```
53 ▾ def run
54     connect
55
56 ▾   until @socket.eof? do
57       | message = @socket.gets
58
59       | puts message
60
61 ▾     | if message.start_with?("PING")
62       |   handle_ping_message(message)
63 ▾     | elsif message.include?("PRIVMSG #{@channel}")
64       |   handle_channel_message(message)
65 ▾     | elsif !@joined && message.include?("MODE #{@name}")
66       |   irc_send_join(@channel)
67       |   @joined = true
68     | end
69   end
70 end
```

IRC Protocol

```
53 ▾ def run
54     connect
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53 ▾ def run
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socket: a connection to the IRC server



IRC Protocol

```
53 ▾ def run
54     connect
55
56 ▾   until @socket.eof? do
57     | message = @socket.gets
58
59     | puts message
```

socket: a connection to the IRC server

message: a message from the IRC server,
according to the IRC protocol

IRC Protocol

```
53 ▾ def run
54   connect
55
56 ▾   until @socket.eof? do
57     message = @socket.gets
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59     puts message
60
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62       handle_ping_message(message)
63 ▾     elsif message.include?("PRIVMSG #{@channel}")
64       handle_channel_message(message)
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66       irc_send_join(@channel)
67       @joined = true
68     end
69   end
70 end
```

:nethad!83.78.226.54 JOIN #rubymonstas

IRC Protocol

```
53 ▾ def run
54   connect
55
56 ▾   until @socket.eof? do
57     message = @socket.gets
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59     puts message
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65 ▾     elsif !@joined && message.include?("MODE #{@name}")
66       irc_send_join(@channel)
67       @joined = true
68     end
69   end
70 end
```

:nethad!83.78.226.54 PART #rubymonstas

IRC Protocol

```
53 ▾ def run
54   connect
55
56 ▾   until @socket.eof? do
57     message = @socket.gets
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```

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

IRC Protocol

```
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54   connect
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:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

IRC Protocol

```
78 | def handle_channel_message(message)
79 |
80 | end
```

IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 def handle_channel_message(message)
79
80 end
```


IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 ▾ def handle_channel_message(message)
79 ▾   if react_to_message?
80     |   irc_send("some IRC client message")
81   end
82 end
```

IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 ▾ def handle_channel_message(message)
79 ▾   if react_to_message?
80     |   irc_send("some IRC client message")
81   end
82 end
```

PRIVMSG #rubymonstas :i'm reacting to the message!

IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 ▾ def handle_channel_message(message)
79     message_parts = extract_message(message)
80 ▾   if react_to_message?
81       send_to_channel("hello!")
82 ▾   elsif message_parts["sender"] == "nethad-bot"
83       send_to_channel("hi nethad's bot!")
84   end
85 end
```

IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 ▾ def handle_channel_message(message)
79     message_parts = extract_message(message)
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82 ▾   elsif message_parts["sender"] == "nethad-bot"
83       send_to_channel("nethad's bot!")
84   end
85 end
```

{"sender" => "nethad", "channel" => "#rubymonstas", "message" => "what's up?"}

IRC Protocol

:nethad!83.78.226.54 PRIVMSG #rubymonstas :what's up?

```
78 ▾ def handle_channel_message(message)
79     message_parts = extract_message(message)
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```

how should **def send_to_channel** look like?

That's it!

Happy Hacking!

Just do it!
