Ruby Monstas

Session 8

Agenda

- Interactive Recap
- Project: IRC Bot (part 2)

Interactive Recap

Project: IRC Bot
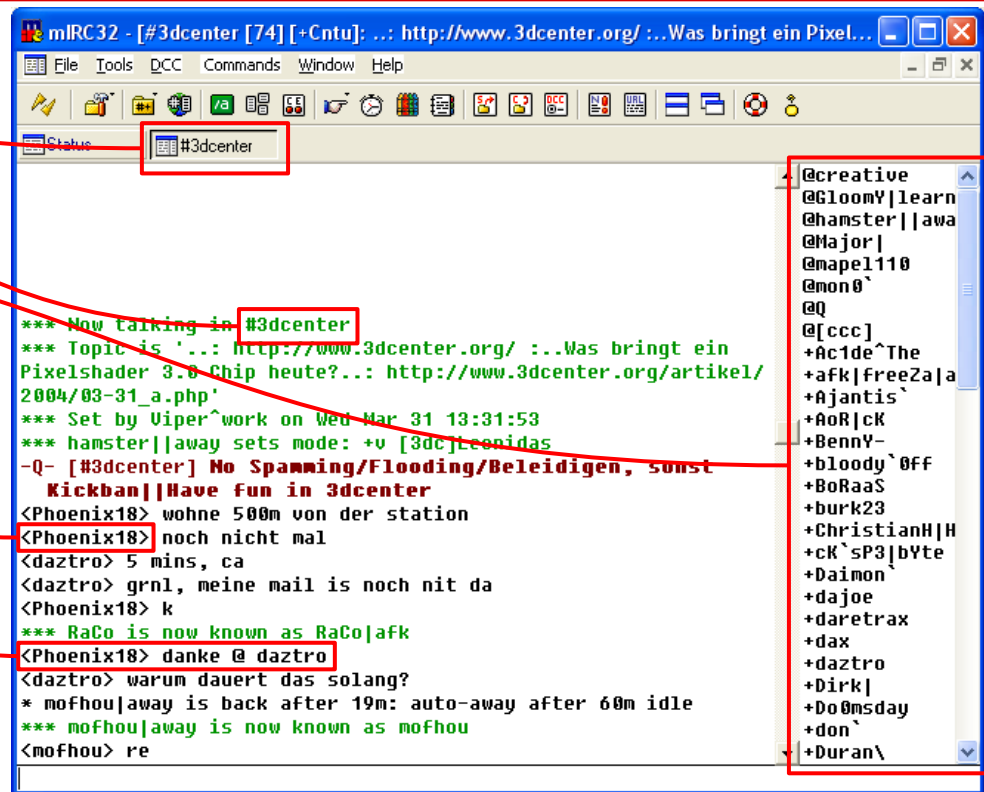
IRC

channel

user list

user

channel message
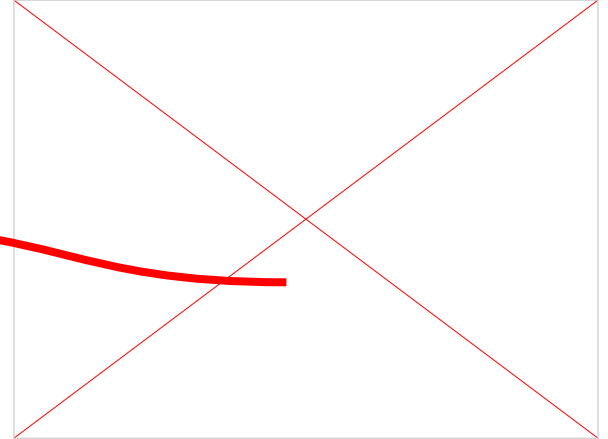
Client / Server Networking

Client   Internet (the "Cloud")   Server

Client / Server Networking

TCP connection

IRC Protocol

```ruby
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

```ruby
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

```ruby
53  def run
54    connect
55
56    until @socket.eof? do
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IRC Protocol

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59         puts message
```

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
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56 ▾    until @socket.eof? do
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59        puts message
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66          irc_send_join(@channel)
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70    end
```

:nethad!83.78.226.54 JOIN #rubymonstas

IRC Protocol

```ruby
53 ▾   def run
54       connect
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56 ▾     until @socket.eof? do
57         message = @socket.gets
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59         puts message
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61 ▾       if message.start_with?("PING")
62           handle_ping_message(message)
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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
```

:nethad!83.78.226.54 PART #rubymonstas

IRC Protocol

```ruby
53 ▾  def run
54      connect
55
56 ▾    until @socket.eof? do
57        message = @socket.gets
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59        puts message
60
61 ▾      if message.start_with?("PING")
62          handle_ping_message(message)
63 ▾      elsif message.include?("PRIVMSG #{@channel}")
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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 PRIVMSG #rubymonstas :what's up?

IRC Protocol

```
53 ▾  def run
54       connect
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56 ▾     until @socket.eof? do
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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)
80 ▾       if react_to_message?
81             send_to_channel("hello!")
82 ▾       elsif message_parts["sender"] == "nethad-bot"
83             send_to_channel(" i 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?

```ruby
def handle_channel_message(message)
  message_parts = extract_message(message)
  if react_to_message?
    send_to_channel("hello!")
  elsif message_parts["sender"] == "nethad-bot"
    send_to_channel("hi nethad's bot!")
  end
end
```

how should **def send_to_channel** look like?

That's it!
Happy Hacking!

Just do it!