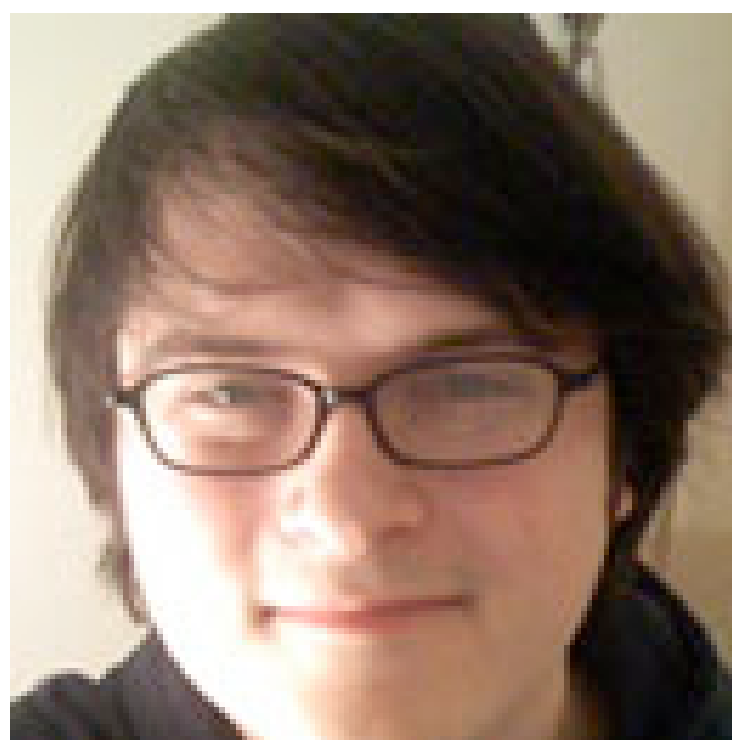
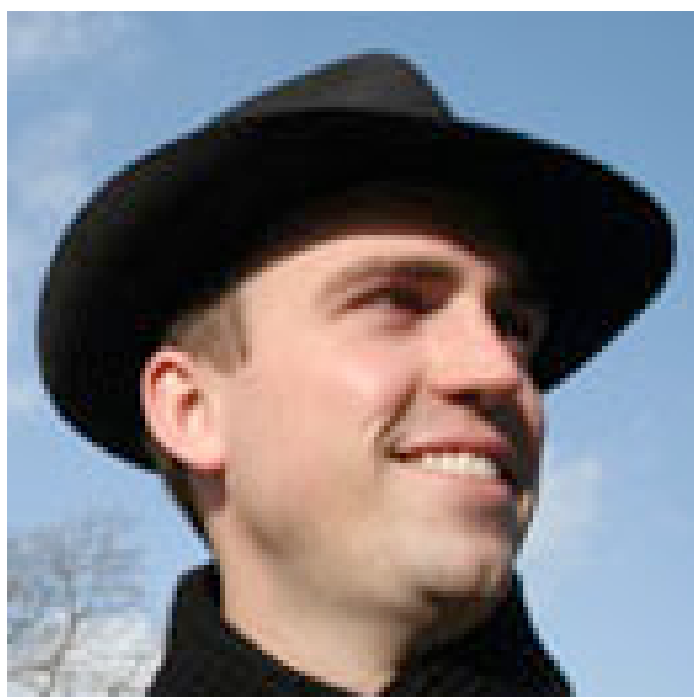
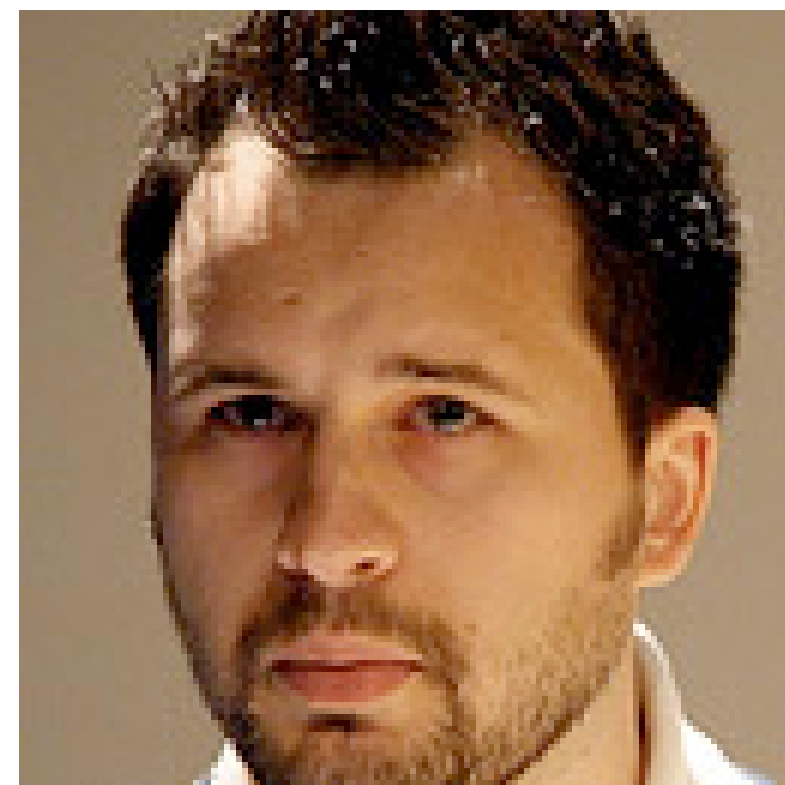


Hi!

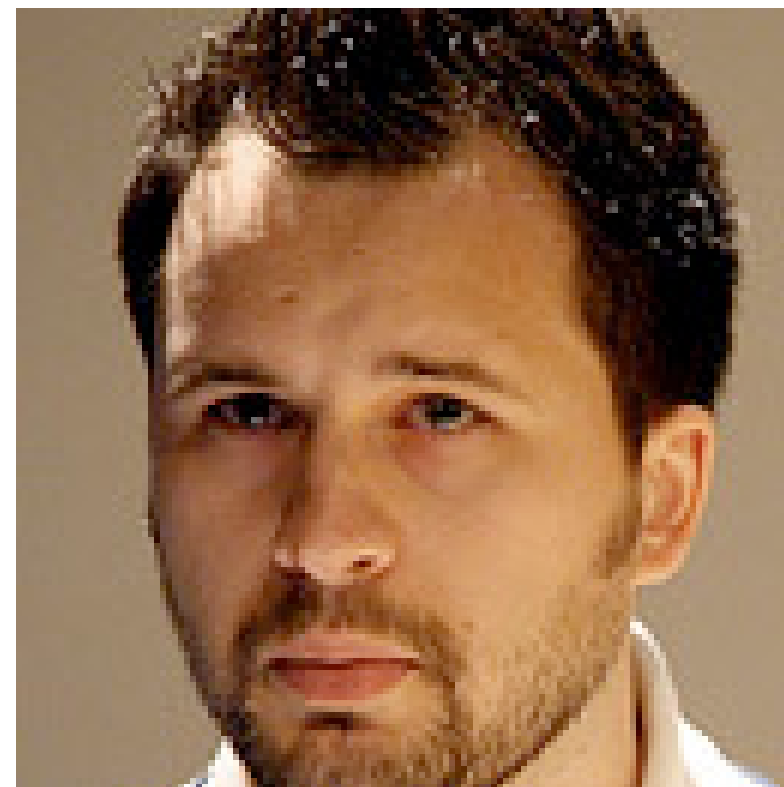




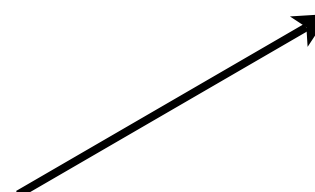
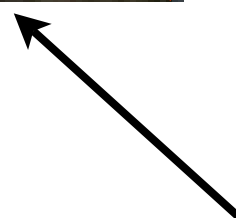




beard



beard



Thin & Rack





<http://www.mykaussie.com/images/tshirt7.jpg>

Sorry!

Story

FriendFeedFeedFeed

ELIGUqLE66qLE66qLE66q

FriendFeedFeedFeed



ELIGUqLE66qLE66qLE66q









A random feed feed feed entry

Eating cookies, yummy!



1
digg

digg it

2

diggs

digg it

Zzzz...





OMG WTF B B Q!! 1 1!! 1

632
diggs

digg it



friendfeedfeedfeed.com



We're sorry, but something went wrong.

We've been notified about this issue and we'll take a look at it shortly.

...

69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
200 712 "<http://friendfeedfeedfeed.com/feeds/2>" "Mozilla/5.0 (Macintosh; U; PPC Mac OS X
Mach-0; en-US; rv:1.8.1.14) Gecko/20080404 Firefox/2.0.0.14"

69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
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69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
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69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
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69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
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69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
200 712 "<http://friendfeedfeedfeed.com/feeds/2>" "Mozilla/5.0 (Macintosh; U; PPC Mac OS X
Mach-0; en-US; rv:1.8.1.14) Gecko/20080404 Firefox/2.0.0.14"

69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
200 712 "<http://friendfeedfeedfeed.com/feeds/2>" "Mozilla/5.0 (Macintosh; U; PPC Mac OS X
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69.110.148.55 - - [09/May/2008:23:58:18 +0000] "GET friendfeedfeedfeed.com/feeds/2 HTTP/1.1"
200 712 "<http://friendfeedfeedfeed.com/feeds/2>" "Mozilla/5.0 (Macintosh; U; PPC Mac OS X
Mach-0; en-US; rv:1.8.1.14) Gecko/20080404 Firefox/2.0.0.14"

A random feed feed feed entry

Eating cookies, yummy!

Cache?

~~Cache?~~

random



Thìn



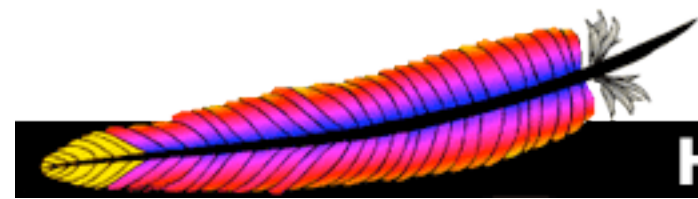
Ruby

A Programmer's Best Friend

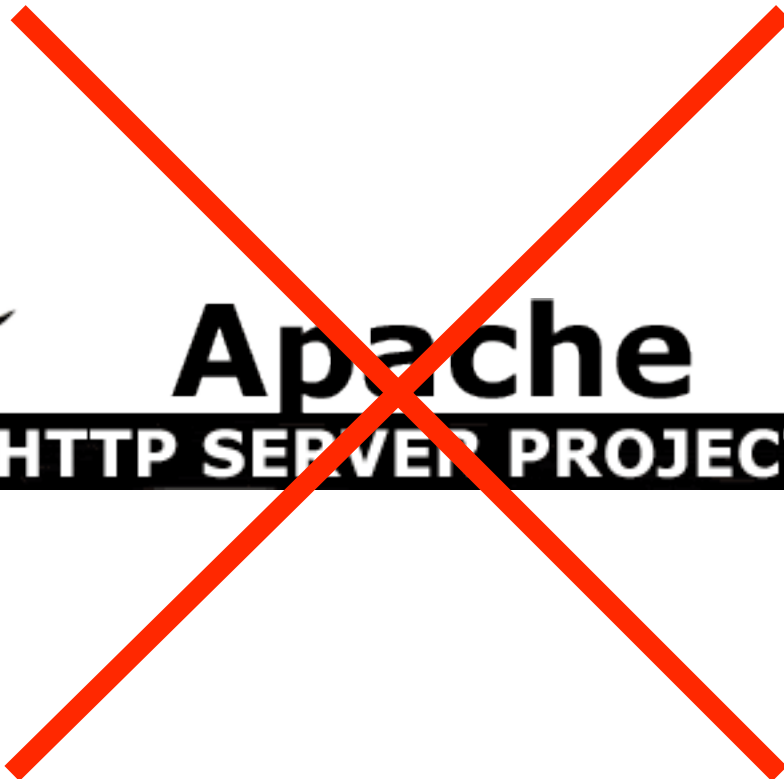
Web Server

Event Driven Web Server





Apache
HTTP SERVER PROJECT



Process-Based

So what?

```
server = TCPServer.new('localhost', 3000)
```

```
loop do
```

```
  client = server.accept
```

```
  puts client.read
```

```
  client.close
```

```
end
```

```
server = TCPServer.new('localhost', 3000)
```

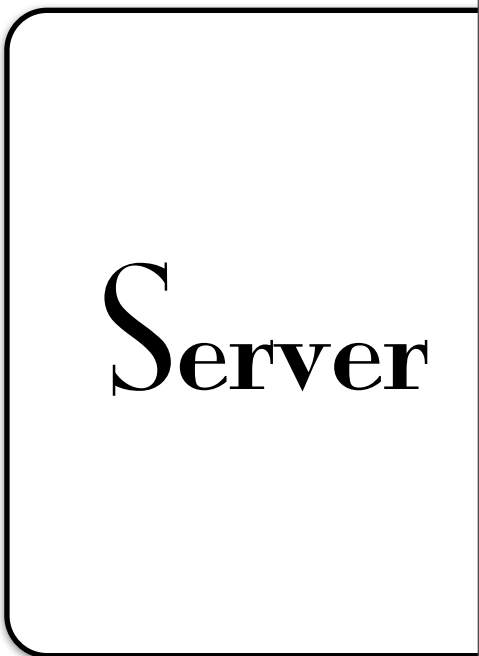
```
  loop do
```

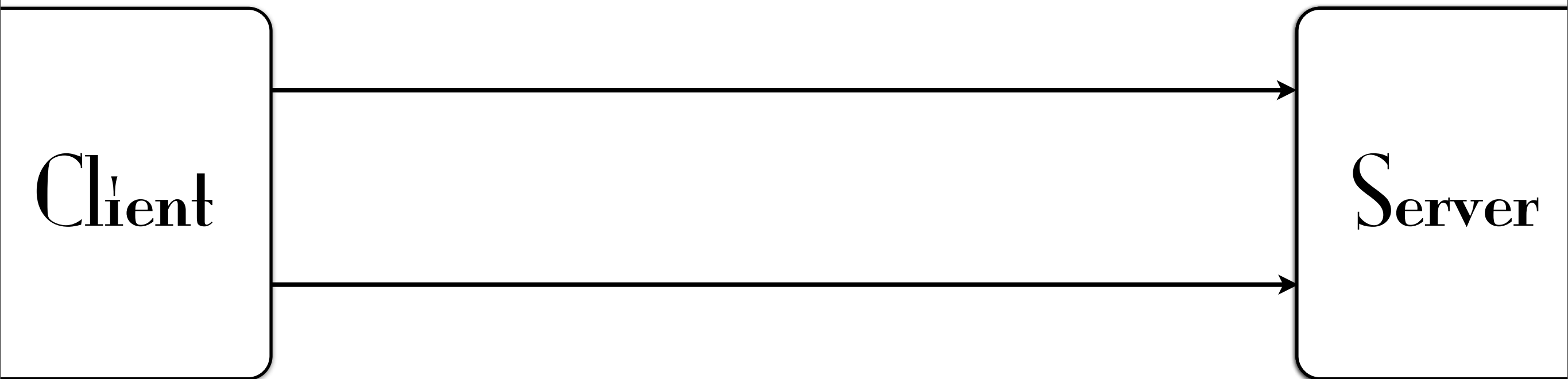
```
    ➡ client = server.accept
```

```
    ➡ puts client.read
```

```
    client.close
```

```
  end
```





```
server = TCPServer.new('localhost', 3000)
```

```
loop do
```

```
  client = server.accept
```

```
  puts client.read
```

```
  client.close
```

```
end
```



```
server = TCPServer.new('localhost', 3000)
```

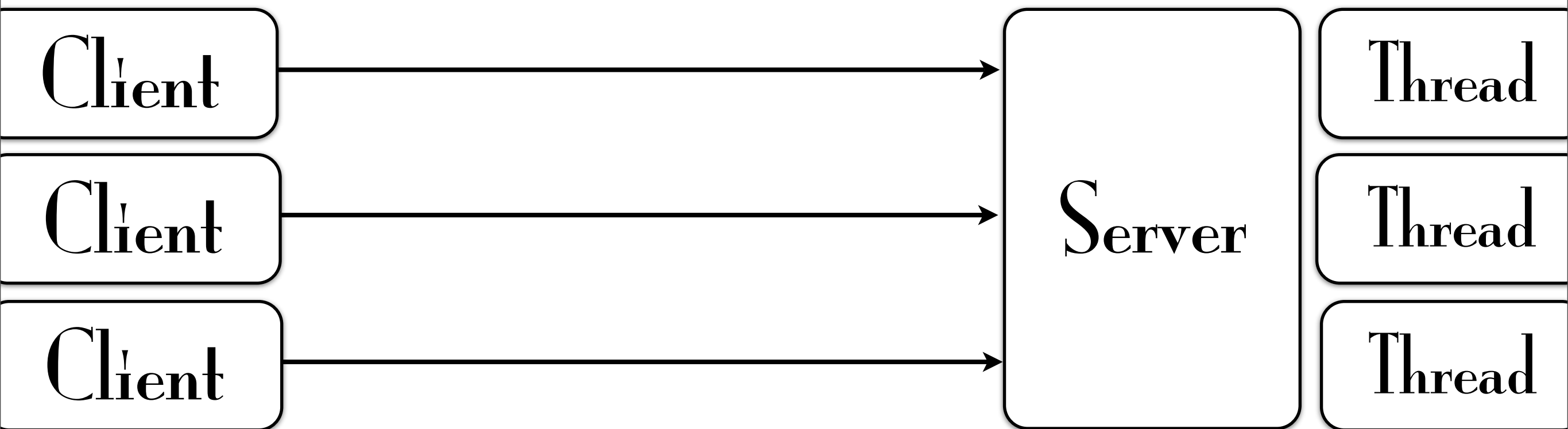
```
loop do  
  client = server.accept  
  Thread.new do  
    puts client.read  
  
    client.close  
  end  
end
```

Client

Client

Client

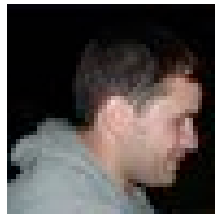
Server



Time

Resources

(?)



macournoyer @kernel notify me if readable about 12 hours ago from web



Non-Blocking Sockets

I/O Multiplexing

OMG WTF B B Q !! 1 1 !! 1

F*****

You lost me at I/O

Complex



Ruby

A Programmer's Best Friend

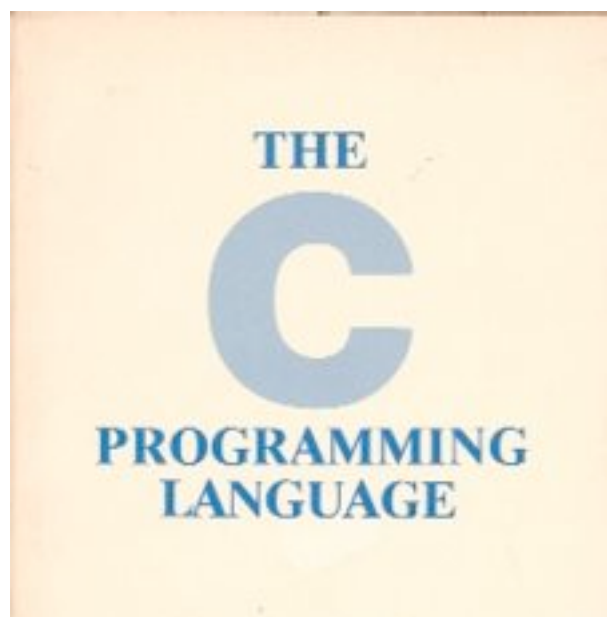
<http://rev.rubyforge.org/>

<http://rubyeventmachine.com/>



<http://twistedmatrix.com/>

<http://code.google.com/p/pyev/>



<http://software.schmorp.de/pkg/libev.html>

Event Driven

Event Driven Web Server


```
server = TCPServer.new('localhost', 3000)
```

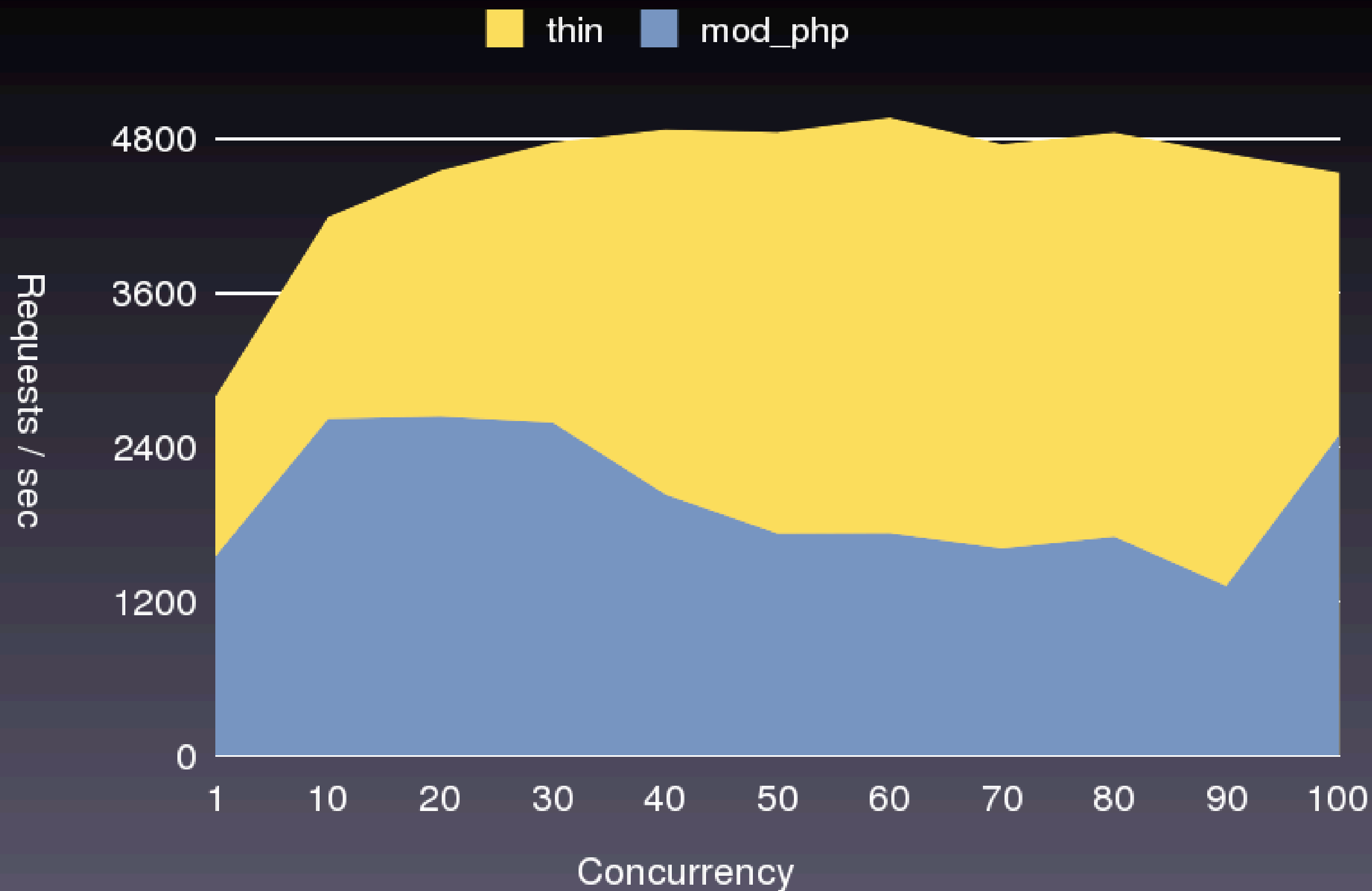
```
server.on_readable do  
  client = server.accept  
  client.on_readable do  
    puts client.read  
  
    client.close  
  end  
end
```

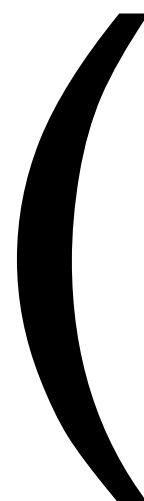
More Connections

Less Memory

Faster

Server benchmark





HTTP

Simple

Flexible

Elegant

Beautiful

and

Sexy



Sexy



Request → Response

Request

POST /path HTTP/1.1
Host: localhost
Connection: close
Content-Length: 6

ohaie!

Response

HTTP/1.1 200 OK

Content-Length: 34

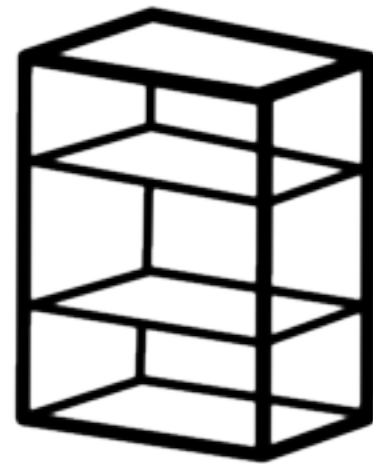
Content-Type: text/html

<html>

 <h1>kthxbaie</h1>

</html>

❧ Thin ❧



rack
powers web applications



Ruby

A Programmer's Best Friend

API



HTTP





WSGI

API

1^{line}

```
proc { lenvl [200, {}, "kthxbai"] }
```

POST / HTTP/1.1
Host: localhost
Connection: close
Content-Length: 6

ohaie!

```
env = {  
  "REQUEST_METHOD" => "POST",  
  "PATH_INFO"      => "/",  
  "HTTP_VERSION"   => "1.1",  
  "HTTP_HOST"      => "localhost",  
  "HTTP_CONNECTION" => "close",  
  "CONTENT_LENGTH"  => "6"  
}
```

```
[
  200,
  {
    "Content-Length" => "34",
    "Content-Type" => "text/html"
  },
  [
    "<html>",
    "  <h1>kthxbaie</h1>",
    "</html>"
  ]
]
```

HTTP/1.1 200 OK
Content-Length: 34
Content-Type: text/html

```
<html>
  <h1>kthxbaie</h1>
</html>
```

```
class MyApp
  def call(env)
    [
      200,
      { 'Content-Type' => 'text/plain' },
      "you requested " + env['PATH_INFO']
    ]
  end
end
```

Run it

my_app.ru

```
run MyApp.new
```

```
map '/other' do  
  run OtherApp.new  
end
```

```
run MyApp.new
```

```
use Rack::CommonLogger
```

```
map '/other' do  
  run OtherApp.new  
end
```

```
run MyApp.new
```

```
thin start -R my_app.ru
```



merb



Sinatra

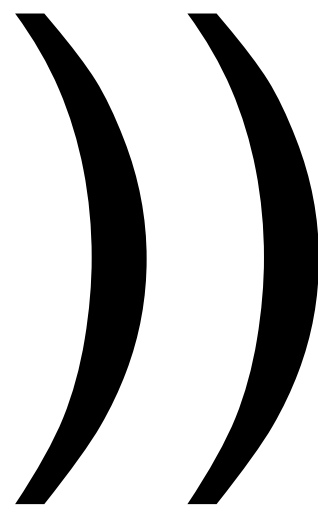
Thin



Ebb

FastCGI





A random feed feed feed entry

Eating cookies, yummy!

A random feed feed feed entry

Eating cookies, yummy!

self.demo! :code

Thanks!

<http://code.macournoyer.com/thin>

Questions ?