Python з нуля

Web-розробка

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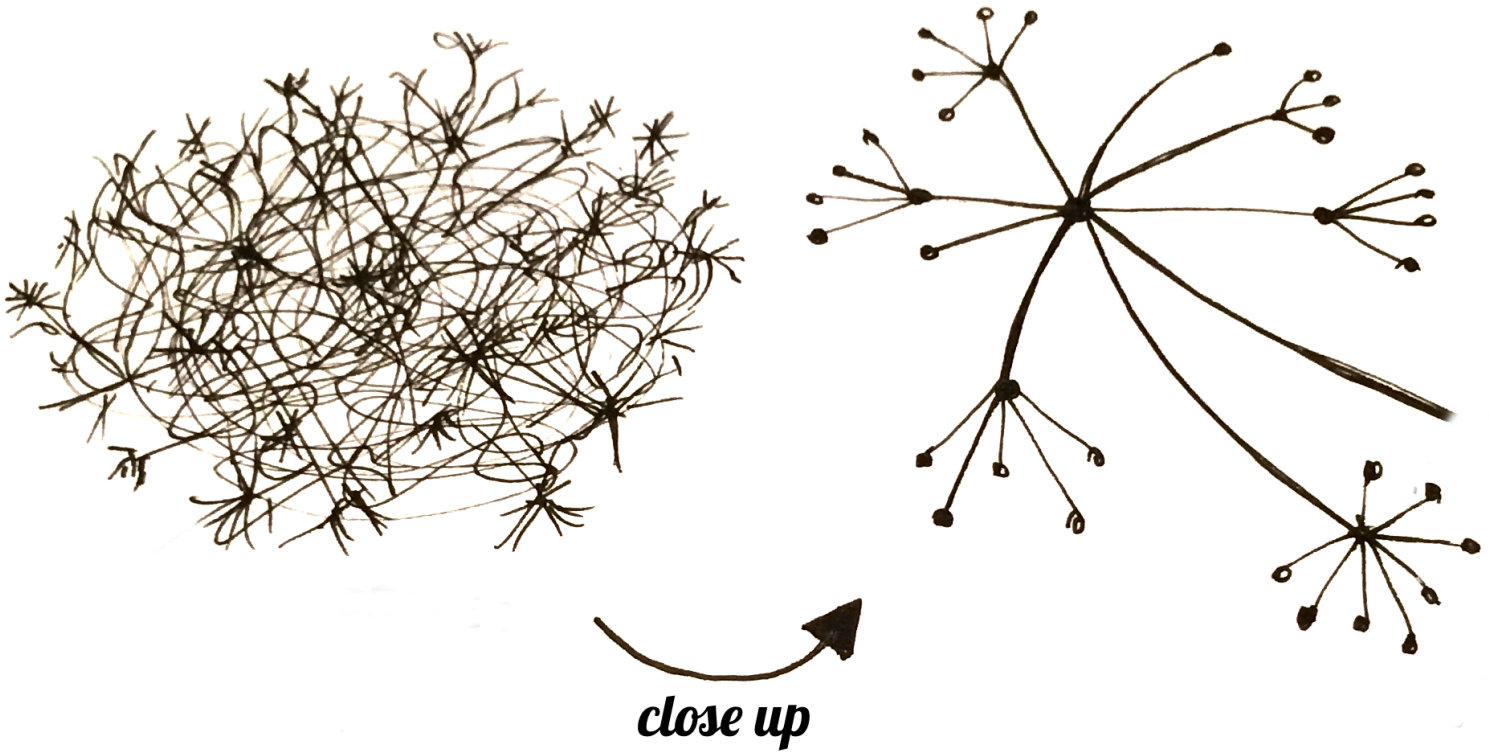
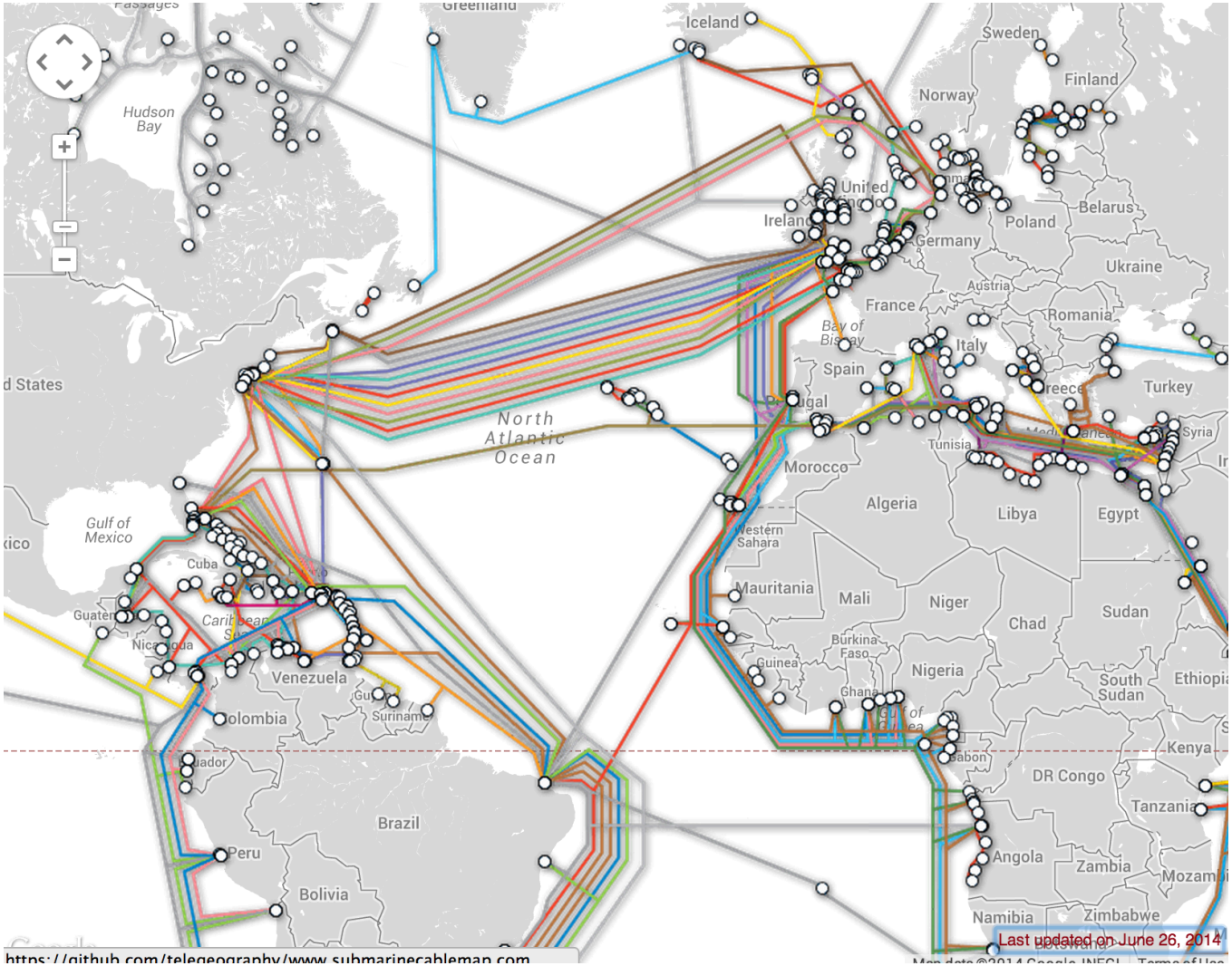
Web Academy

3 березня 2015 р.

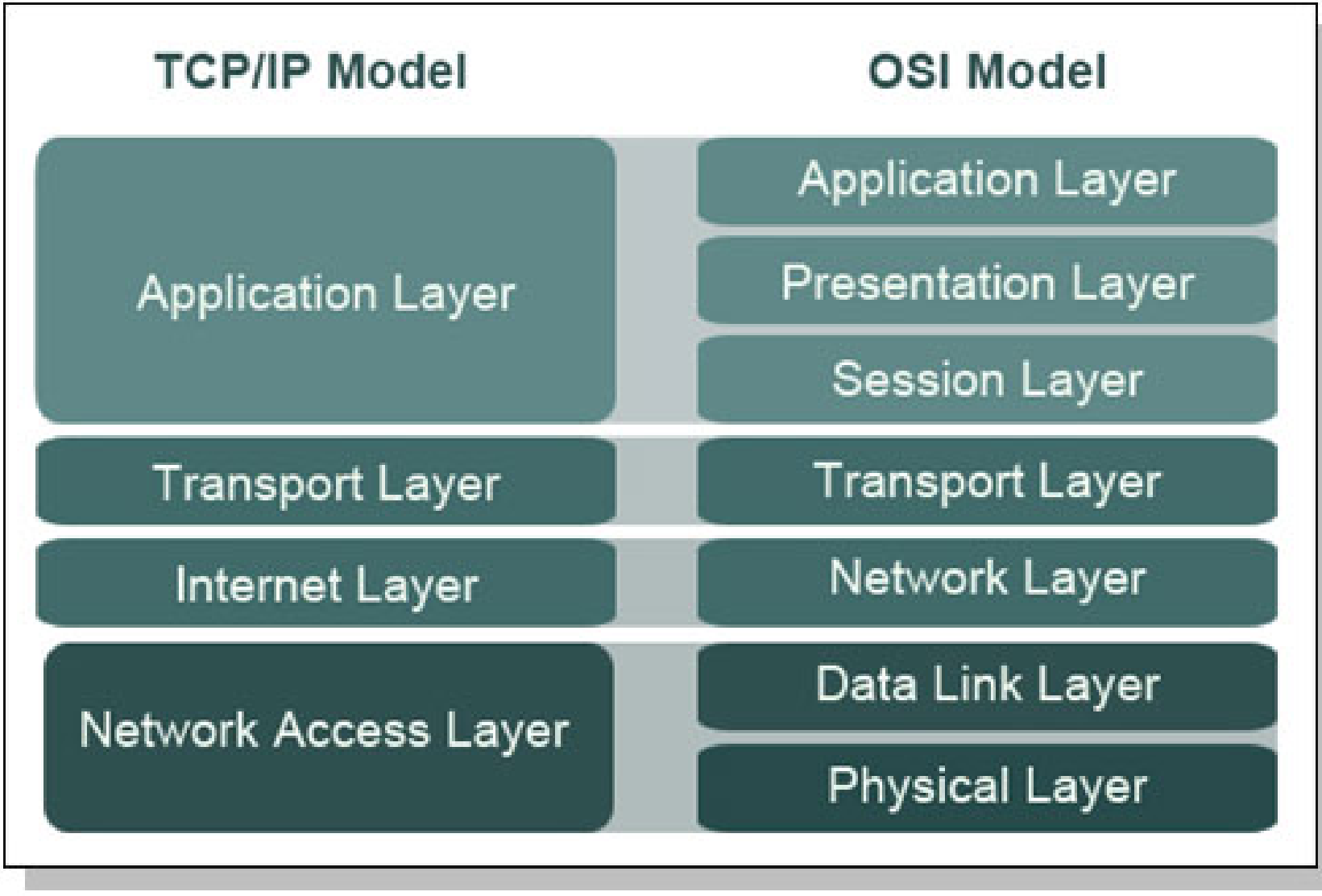
Інтернет



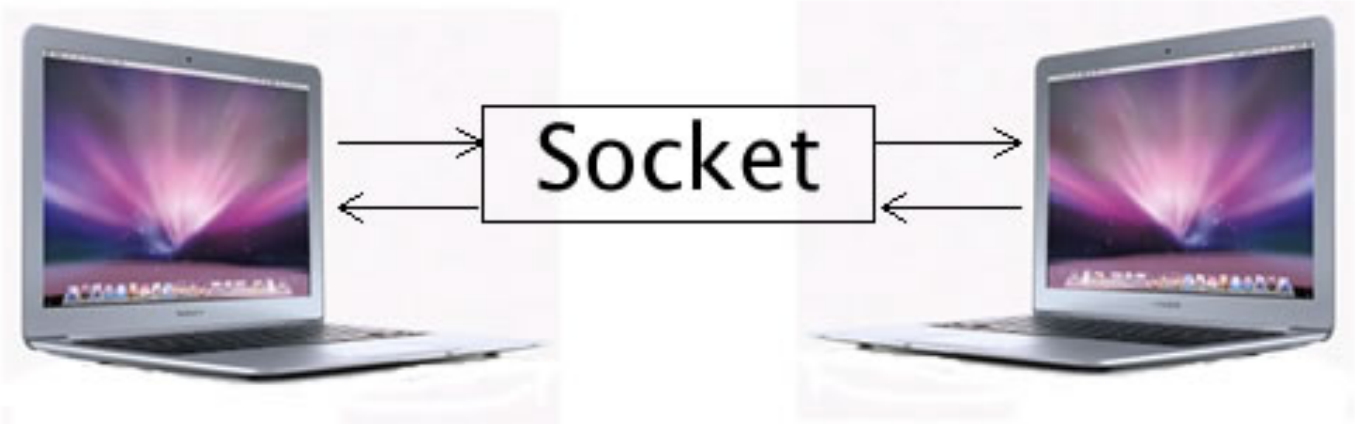
Інтернет


Iceland
Sweden
Finland
Norway
Hudson Bay
Belarus
Poland
Germany
Ukraine
France
Austria
Romania
Italy
Spain
Turkey
Tunisia
Syria
Morocco
North Atlantic Ocean
Algeria
Libya
Egypt
Western Sahara
Gulf of Mexico
Cuba
Mauritania
Mali
Niger
Chad
Sudan
Burkina Faso
Guinea
Nigeria
Venezuela
Colombia
Suriname
Ghana
South Sudan
Ethiopia
Kenya
DR Congo
Tanzania
Brazil
Peru
Angola
Zambia
Bolivia
Namibia
Zimbabwe
Last updated on June 26, 2014
https://github.com/telegeography/www.submarinecablemap.com

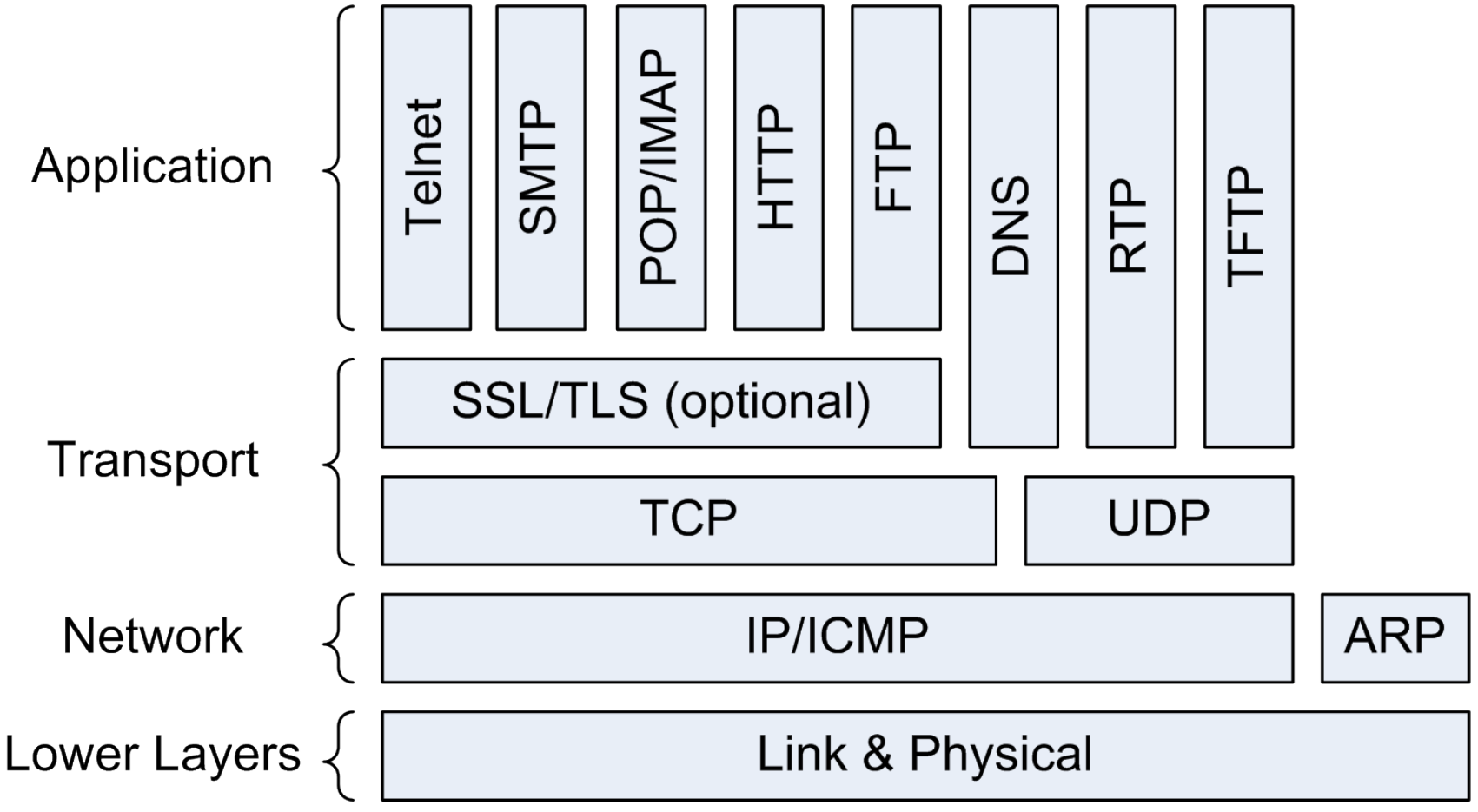
Інтернет


TCP/IP Model
OSI Model
Application Layer
Application Layer
Presentation Layer
Session Layer
Transport Layer
Transport Layer
Internet Layer
Network Layer
Network Access Layer
Data Link Layer
Physical Layer

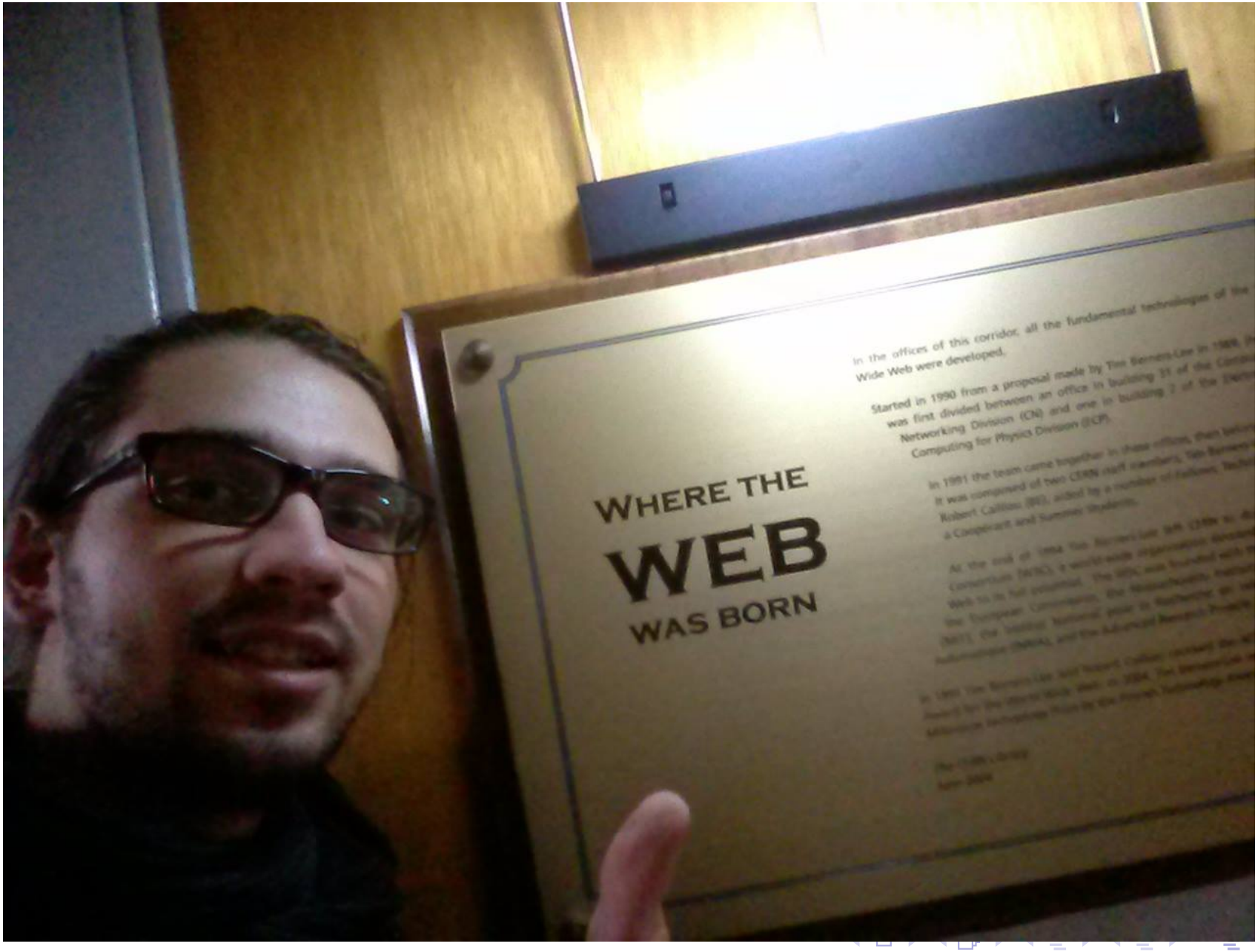
TCP / IP



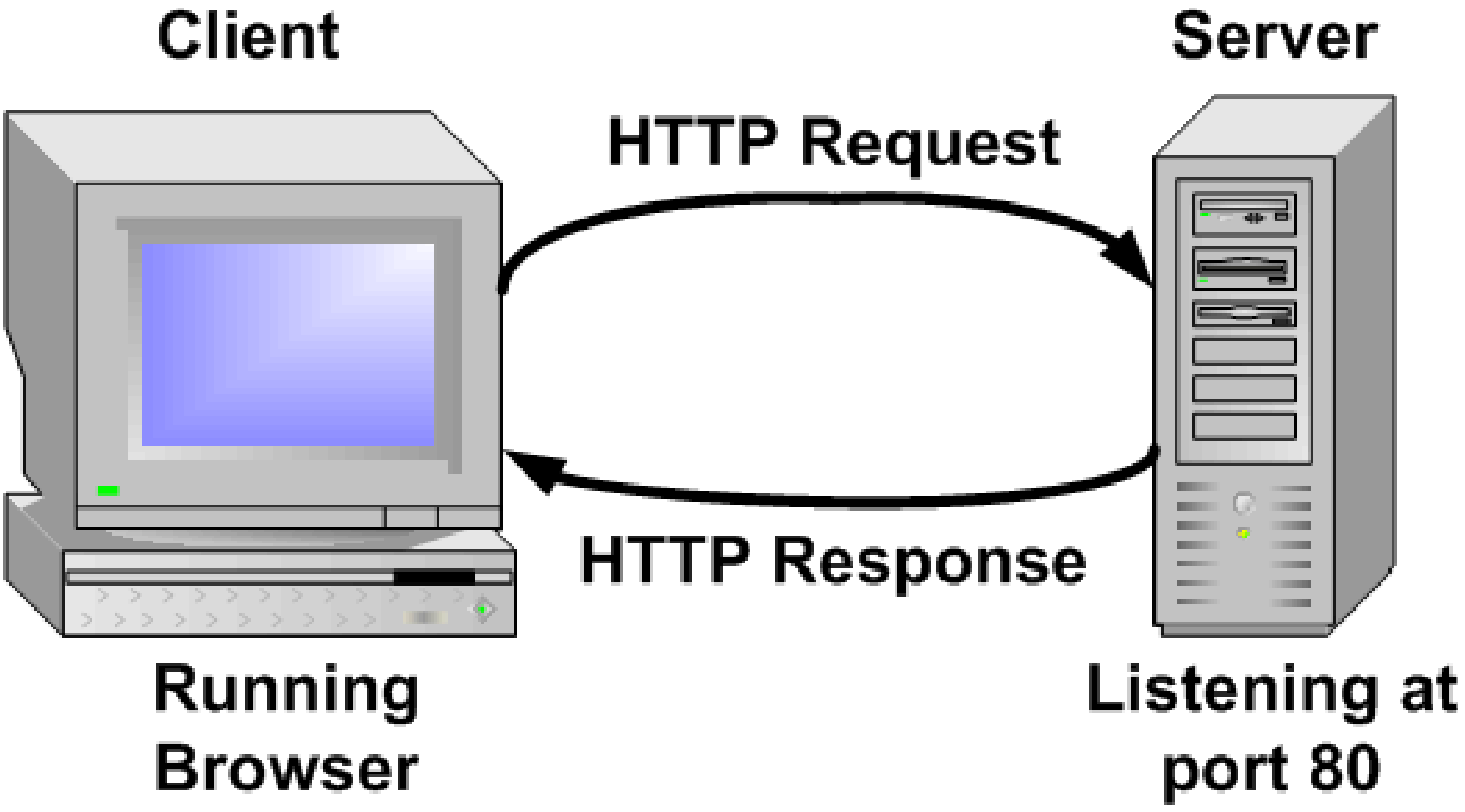
Протоколи


Application
Telnet
SMTP
POP/IMAP
HTTP
FTP
DNS
RTP
TFTP
Transport
SSL/TLS (optional)
TCP
UDP
Network
IP/ICMP
ARP
Lower Layers
Link & Physical

World Wide Web

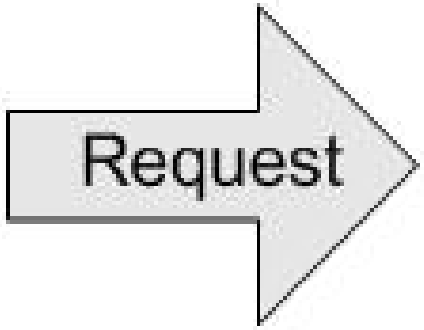


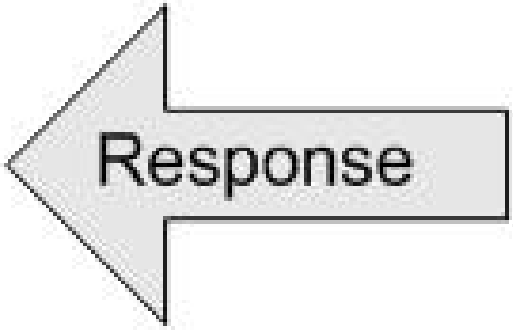
HTTP


Client
Server
HTTP Request
HTTP Response
Running
Browser
Listening at
port 80

HTTP

```
POST /path/bank.asmx HTTP/1.1
Content-Type: text/xml
SOAPAction: "urn:banking:transfer"
Content-Length: nnnn

<soap:Envelope...
```

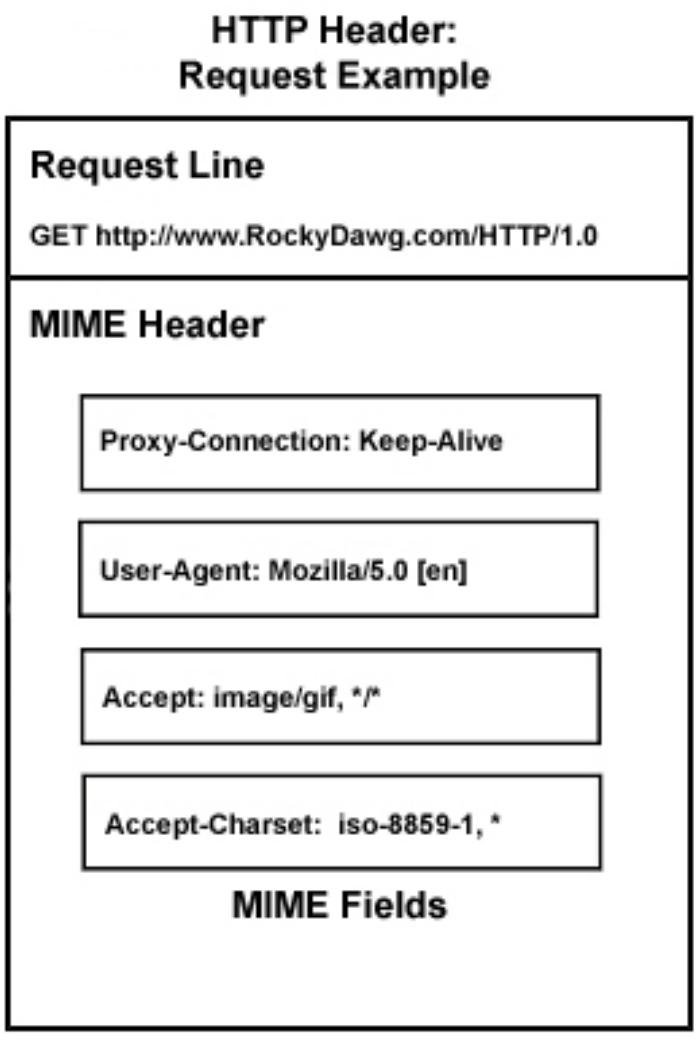


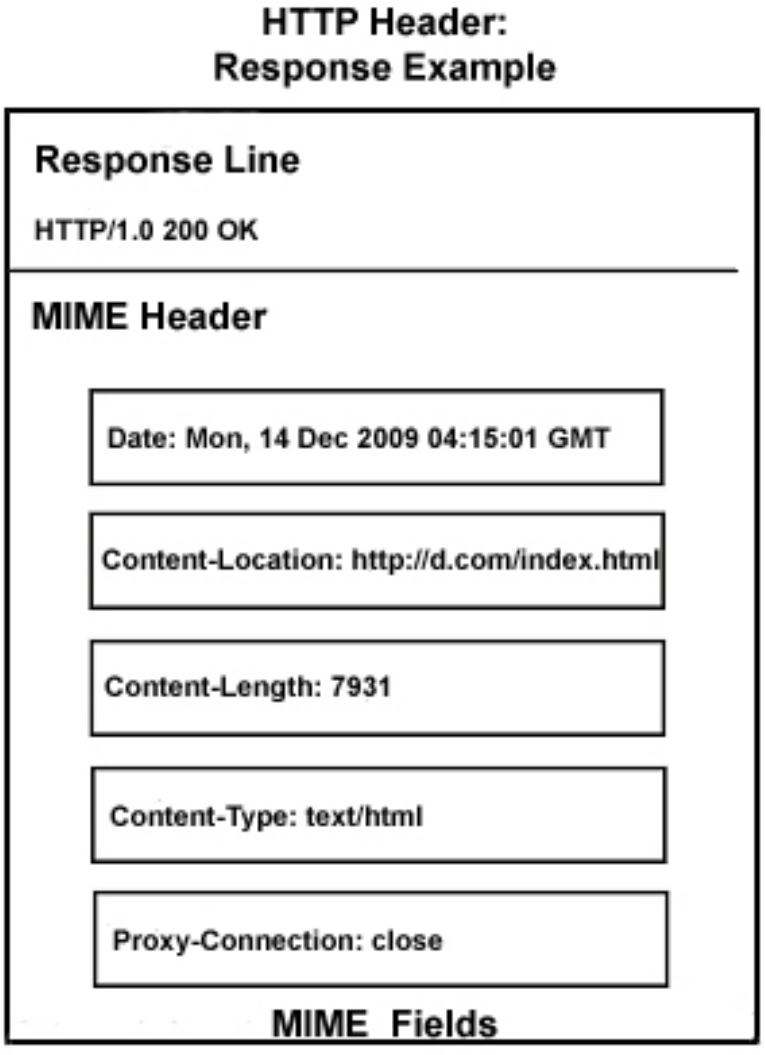



```
HTTP/1.1 200 OK
Content-Type: text/xml
Content-Length: nnnn

<soap:Envelope...
```

```
HTTP/1.1 500 Internal Server Error
Content-Type: text/xml
Content-Length: nnnn

<soap:Envelope…
```

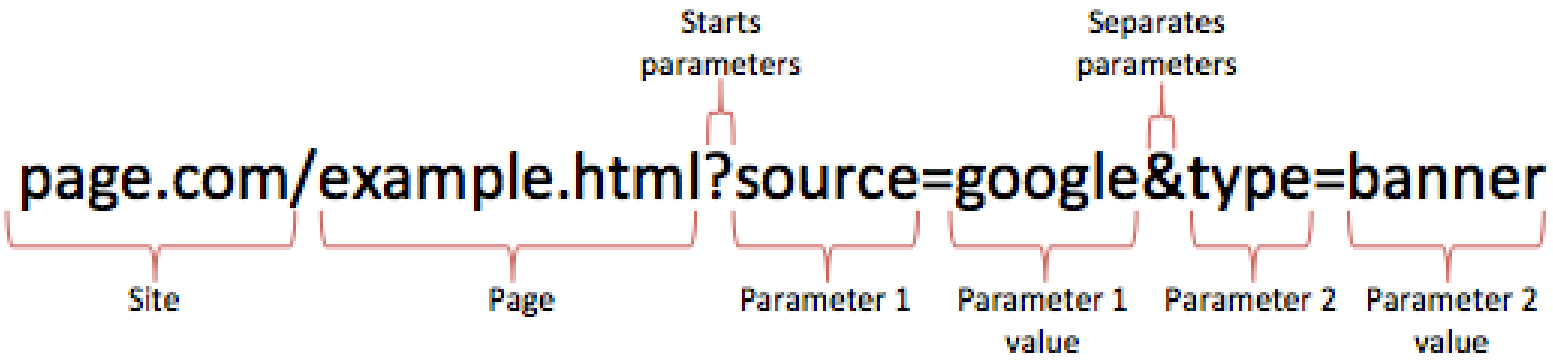
HTTP


HTTP Header:
Request Example
Request Line
GET http://www.RockyDawg.com/HTTP/1.0
MIME Header
Proxy-Connection: Keep-Alive
User-Agent: Mozilla/5.0 [en]
Accept: image/gif, */*
Accept-Charset: iso-8859-1, *
MIME Fields


HTTP Header:
Response Example
Response Line
HTTP/1.0 200 OK
MIME Header
Date: Mon, 14 Dec 2009 04:15:01 GMT
Content-Location: http://d.com/index.html
Content-Length: 7931
Content-Type: text/html
Proxy-Connection: close
MIME Fields

HTTP

URL


Starts parameters
Separates parameters
page.com/example.html?source=google&type=banner
Site
Page
Parameter 1
Parameter 1 value
Parameter 2
Parameter 2 value

HTTP

Запити (Requests)

Методи:

- GET
- POST
- PUT
- HEAD
- ...

HTTP

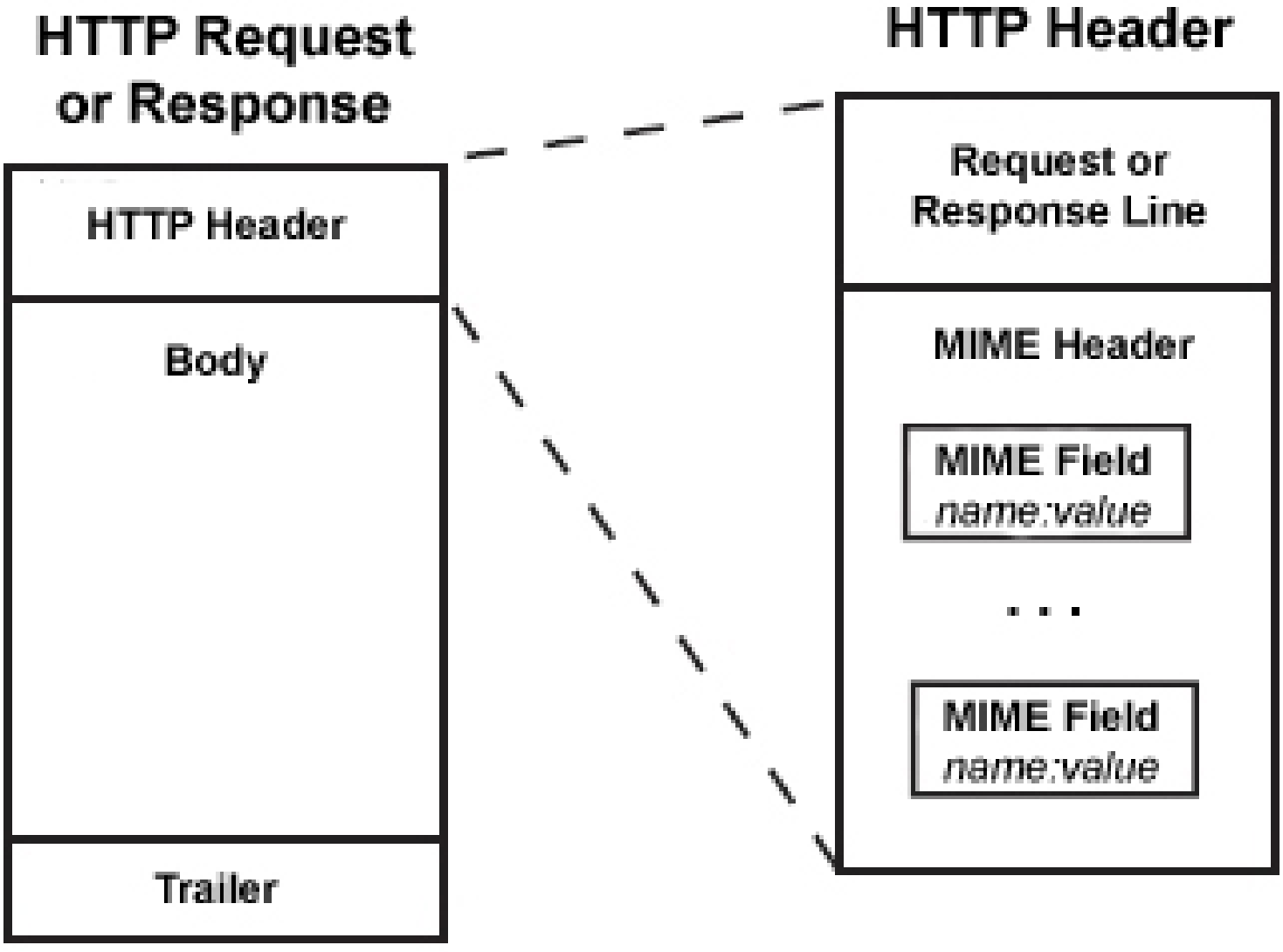
Відповіді (Response)

Статуси:

- 200 OK
- 301 Moved Permanently
- 400 Bad Request
- 401 Unauthorized
- 403 Forbidden
- 404 Not Found
- 500 Internal Server Error

HTTP

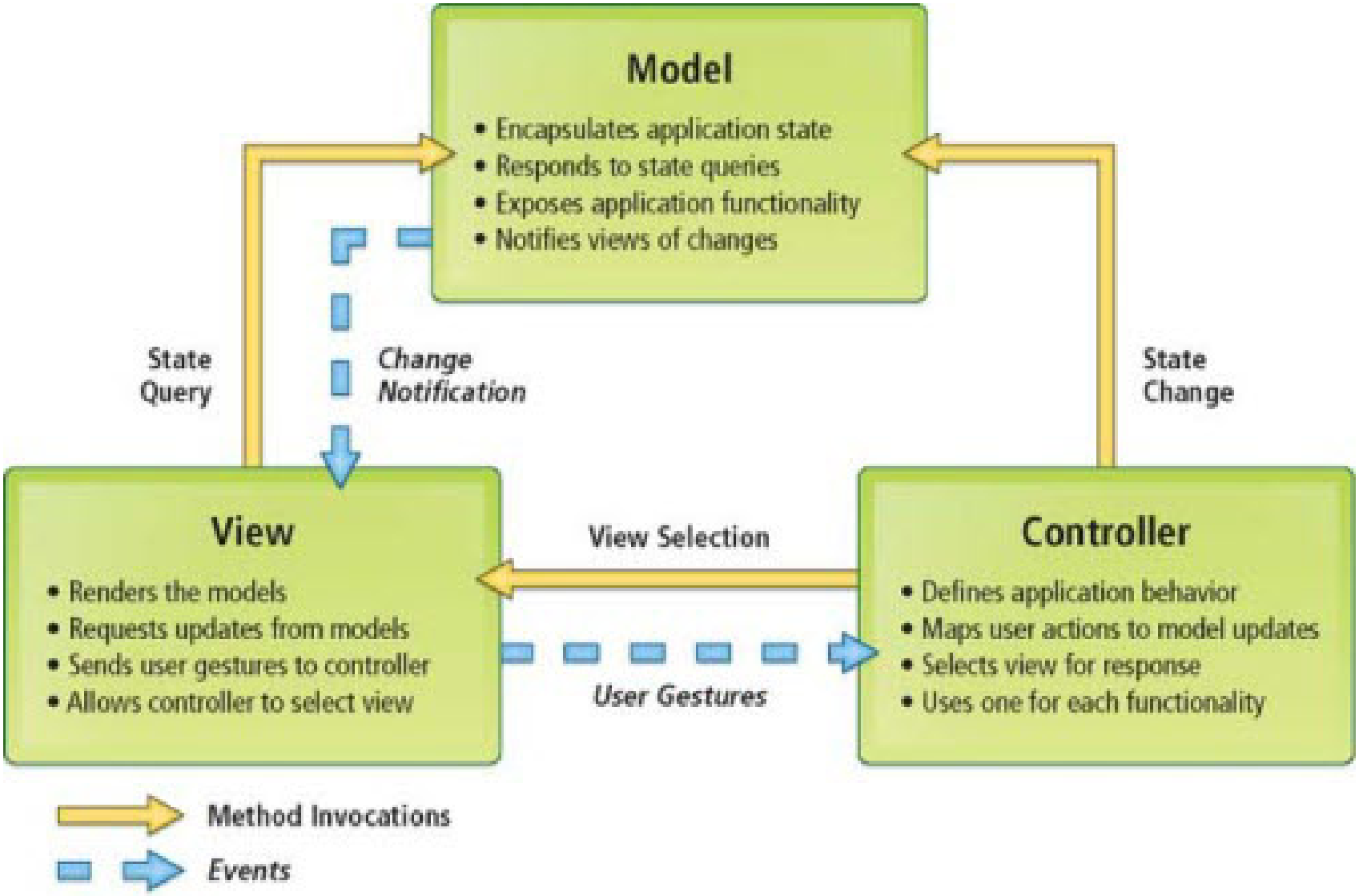
Заголовки



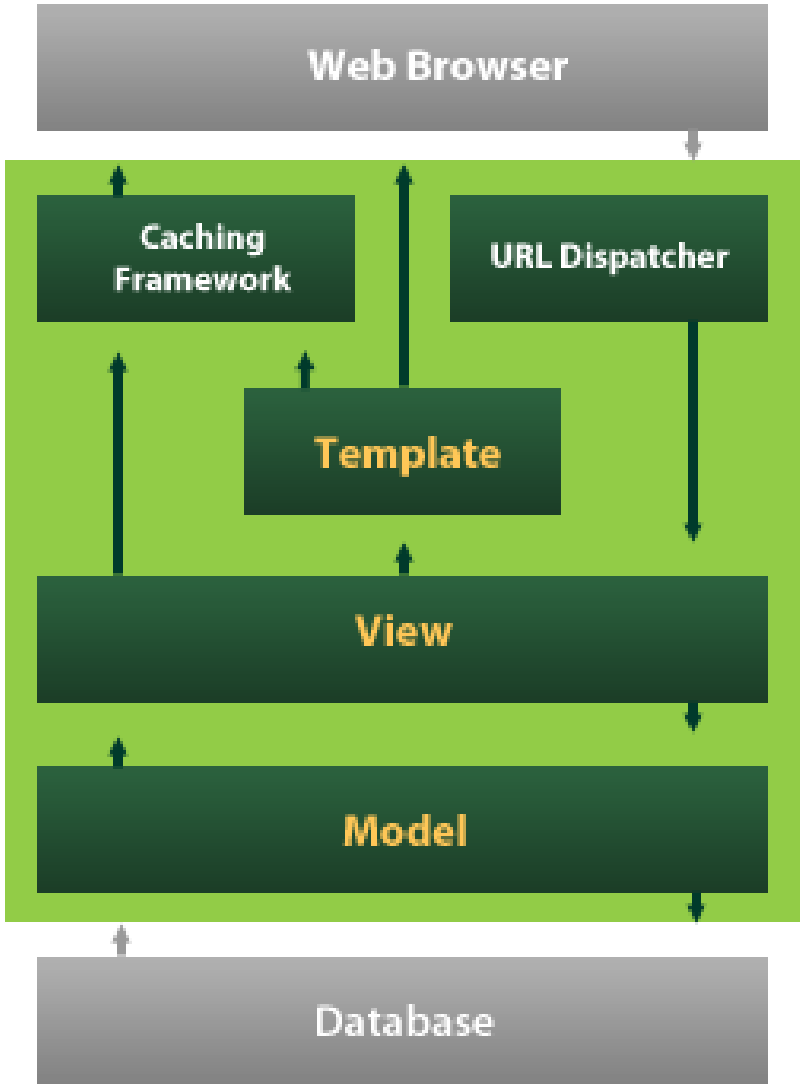
Web-фреймворки

- Django
  High-level Python Web framework that encourages rapid development and clean, pragmatic design
- Flask
  Microframework for Python based on Werkzeug, Jinja 2 and good intentions
- Twisted
  Event-driven networking engine written in python
- Tornado
  Python web framework and asynchronous networking library, ideal for long polling, WebSockets, and other applications that require a long-lived connection to each user
- Cyclone
  Web server framework for Python that implements the Tornado API as a Twisted protocol

MVC


Model
• Encapsulates application state
• Responds to state queries
• Exposes application functionality
• Notifies views of changes
State Query
Change Notification
State Change
View
• Renders the models
• Requests updates from models
• Sends user gestures to controller
• Allows controller to select view
View Selection
User Gestures
Controller
• Defines application behavior
• Maps user actions to model updates
• Selects view for response
• Uses one for each functionality
Method Invocations
Events

Django MVC


Web Browser
Caching Framework
URL Dispatcher
Template
View
Model
Database