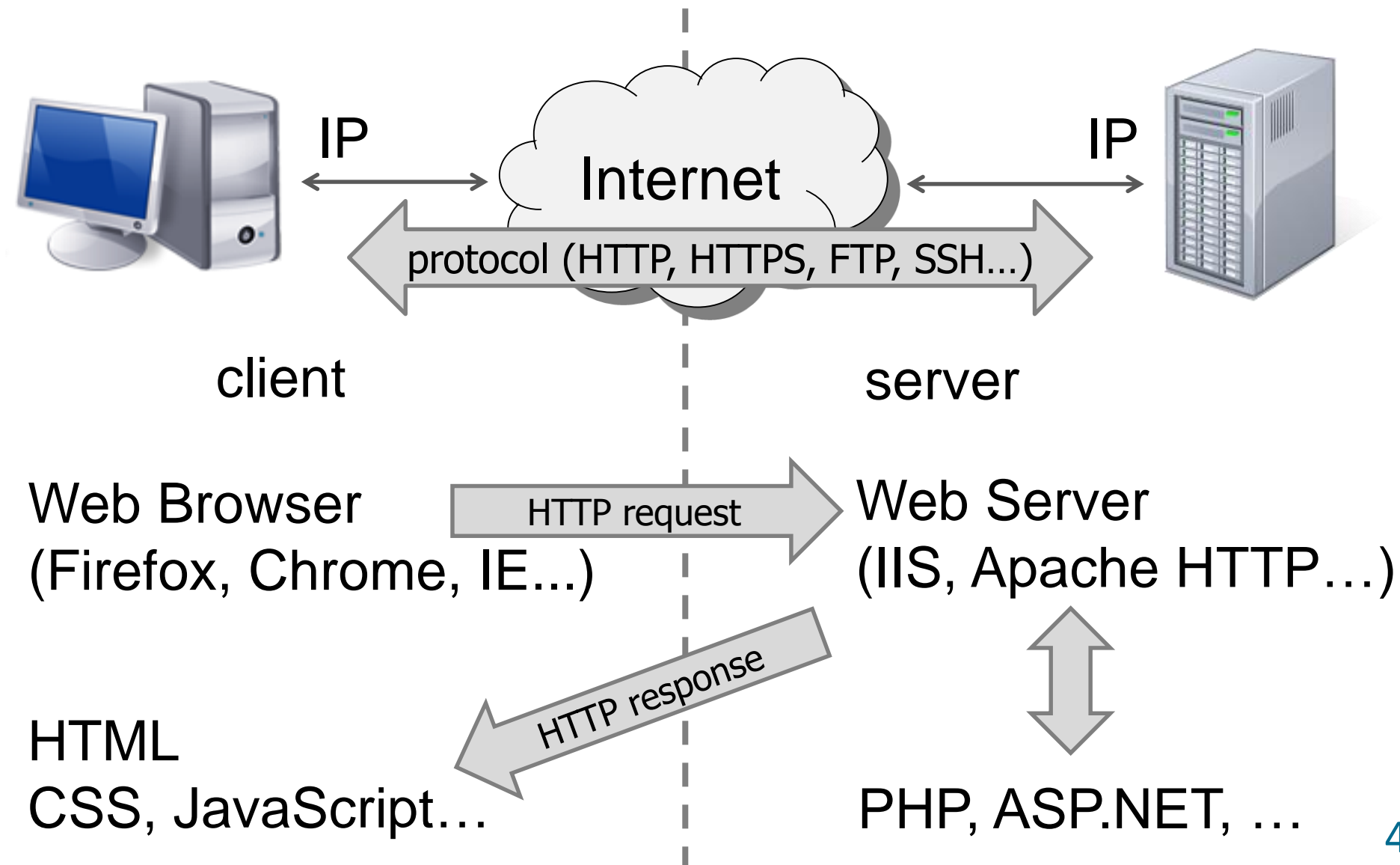# WEB FOUNDAMENTALS

Exercise 1 – Web Foundamentals

World Wide Web

- Internet

- Client - Server

- Protocols and technologies

- World Wide Web
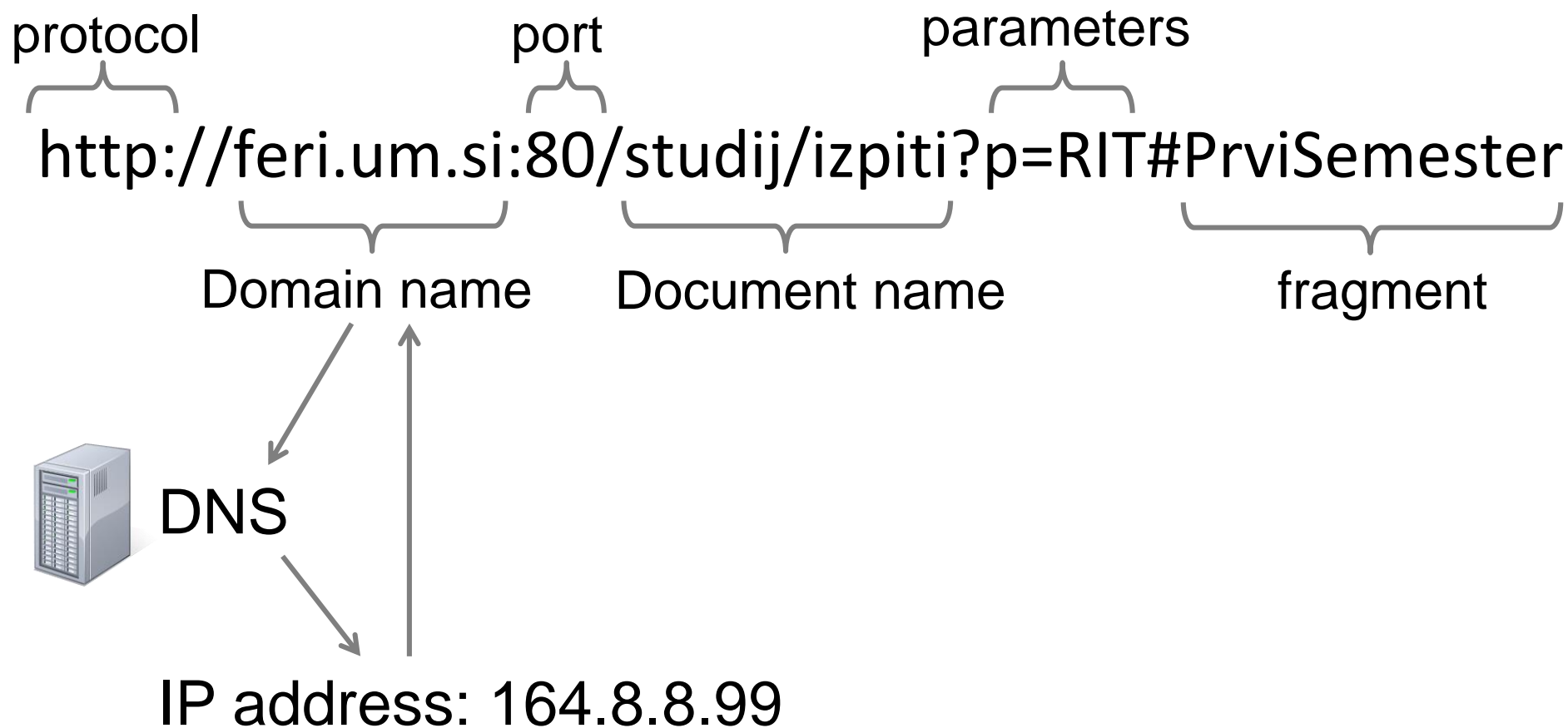
- Browsers

- Web server

Internet

Client - Server

IP

Internet

IP

protocol (HTTP, HTTPS, FTP, SSH...)

client

server

Web Browser
(Firefox, Chrome, IE...)

HTTP request

Web Server
(IIS, Apache HTTP…)

HTML
CSS, JavaScript…

HTTP response

PHP, ASP.NET, …

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World Wide Web

- ■ A set of connected documents

- ■ Documents stored on the server

- ■ Linking to other documents by URL address

URL Address

protocol   port   parameters

http://feri.um.si:80/studij/izpiti?p=RIT#PrviSemester

Domain name   Document name   fragment

DNS

IP address: 164.8.8.99

Search engines

- ■ > 1 billion of active web pages
- ■ Search engines
  - ▪ www.google.com
  - ▪ www.bing.com
  - ▪ www.najdi.si
  - ▪ www.wolframalpha.com
- ■ Knowledge databases
  - ▪ www.wikipedia.com
  - ▪ www.w3schools.com

Web Browsers

- Serves for „displaying" a document
- Follows certain standards and technologies for displaying documents:
  - HTML
  - CSS
  - JS
- Differs in the supported features
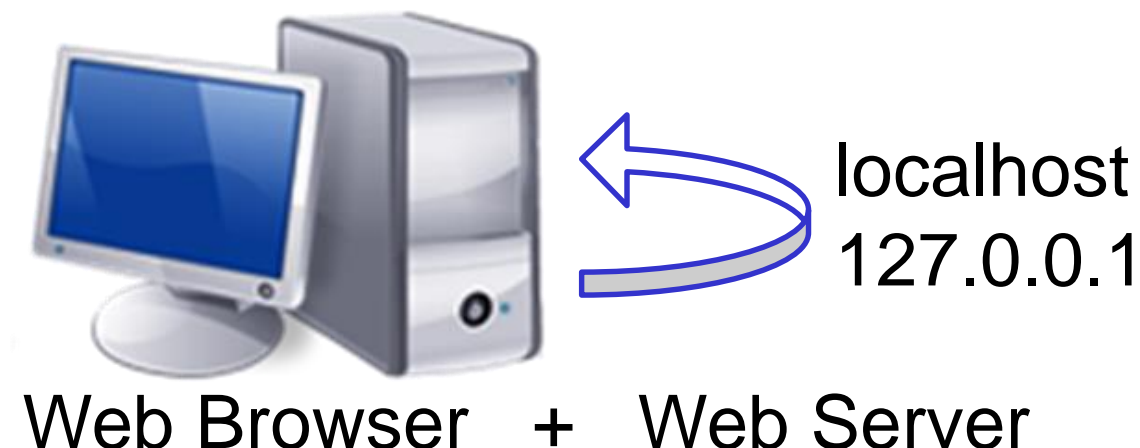
Developers Tools

- View HTML code

- View CSS code

- Calculate element positions

- Follow events

- Javascript console

- View included sources

- Monitoring network traffic

- Security

Software web server

- Program, running on server
  - Apache
  - Nginx
  - ISS
- Waiting for HTTP requests
- Starts the dynamicall generation of the output document
  - Different programming languages

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Developing web applications

- ■ Install software web server on your PC
  - ▪ WAMP, LAMP, MAMP, XAMPP,…
- ■ Use web hosting instead

localhost
127.0.0.1

Web Browser   +   Web Server

Presentation – Questions

- **Basic terms**
  - Definition
  - List

- **Use of search engines**
  - Meaning of abbreviation
  - Default port for protocol

- **Web technologies**
  - Describe
  - Copy code sample