

Web Development in a Nutshell

<http://tinyurl.com/web-nutshell>

Hector Correa (he/him/his) | hector_correa@princeton.edu
Robert-Anthony Lee-Faison (he/him/his) | rl3667@princeton.edu

Agenda

- What is a web application
- Client-side (HTML, CSS)
- HTTP
- Server-side (Ruby)
 - Installing Ruby
 - Server-side with Ruby
 - Sinatra views
 - Sinatra routes
 - HTTP POST / HTML FORMs
- JavaScript (optional)

Have questions? Feel free to ask them throughout the workshop.

Code of Conduct.

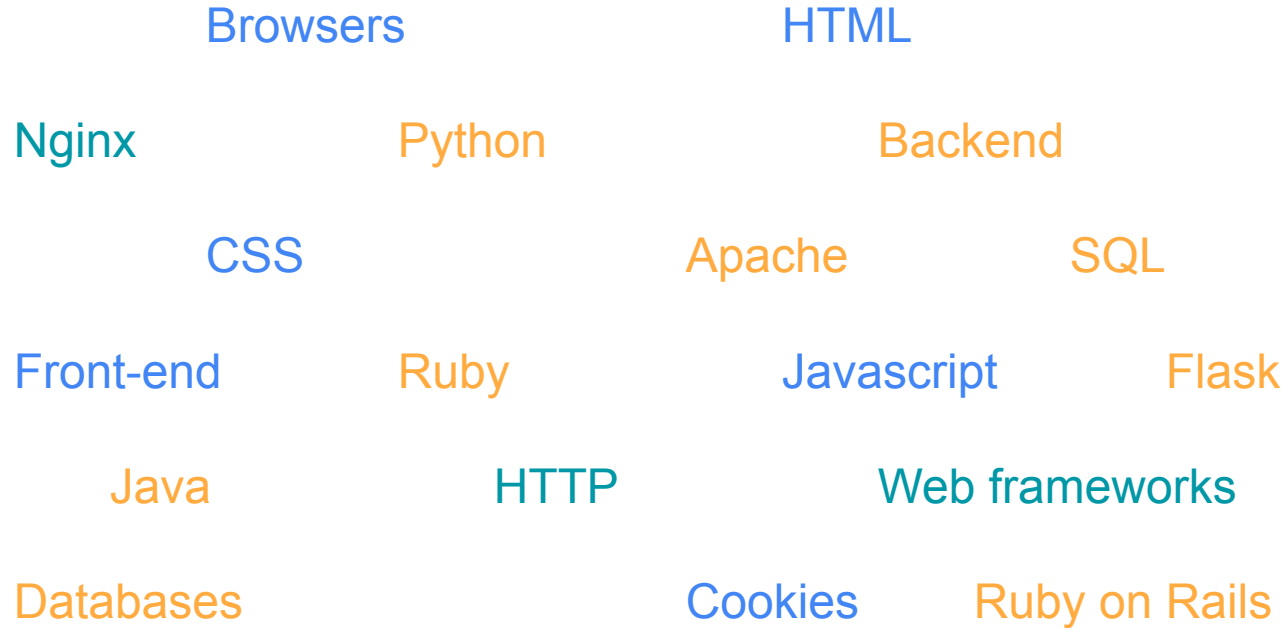
What is a web application?

“A web application is software that runs in your web browser.”

References:

- <https://aws.amazon.com/what-is/web-application/>
- https://en.wikipedia.org/wiki/Web_application

Lots of technologies...



What is a web application?

“A web application is software that runs in your web browser.”

...and runs on a network

References:

- <https://aws.amazon.com/what-is/web-application/>
- https://en.wikipedia.org/wiki/Web_application

Two sides of a web application

- **Client-side**

- Browsers know how to *render* HTML files
- HTML a text file with content

- **Server-side**

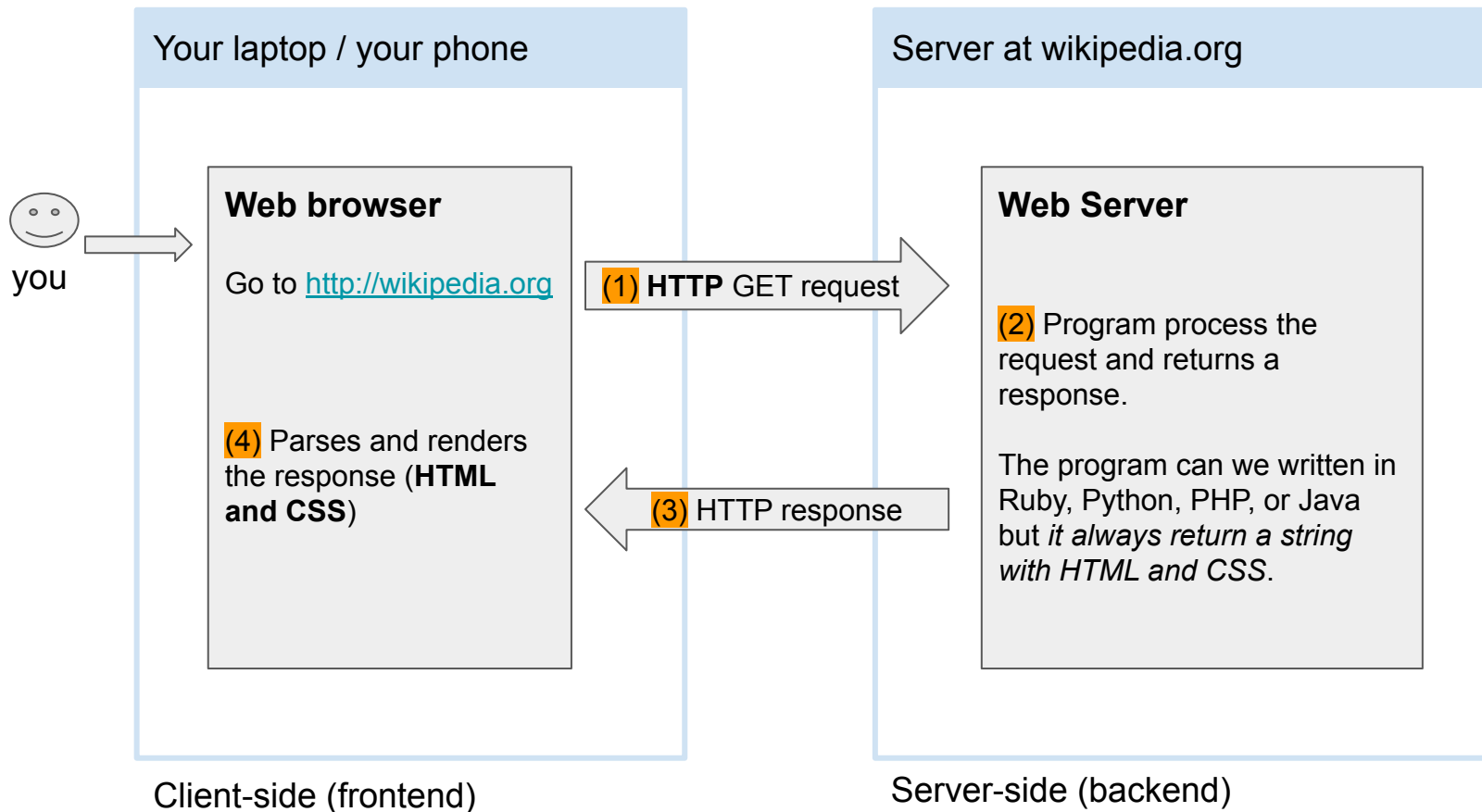
- Web servers
- *Produce* the HTML for the browser
- Backend code (Ruby, Python, PHP, Java, C#)

- **HTTP**

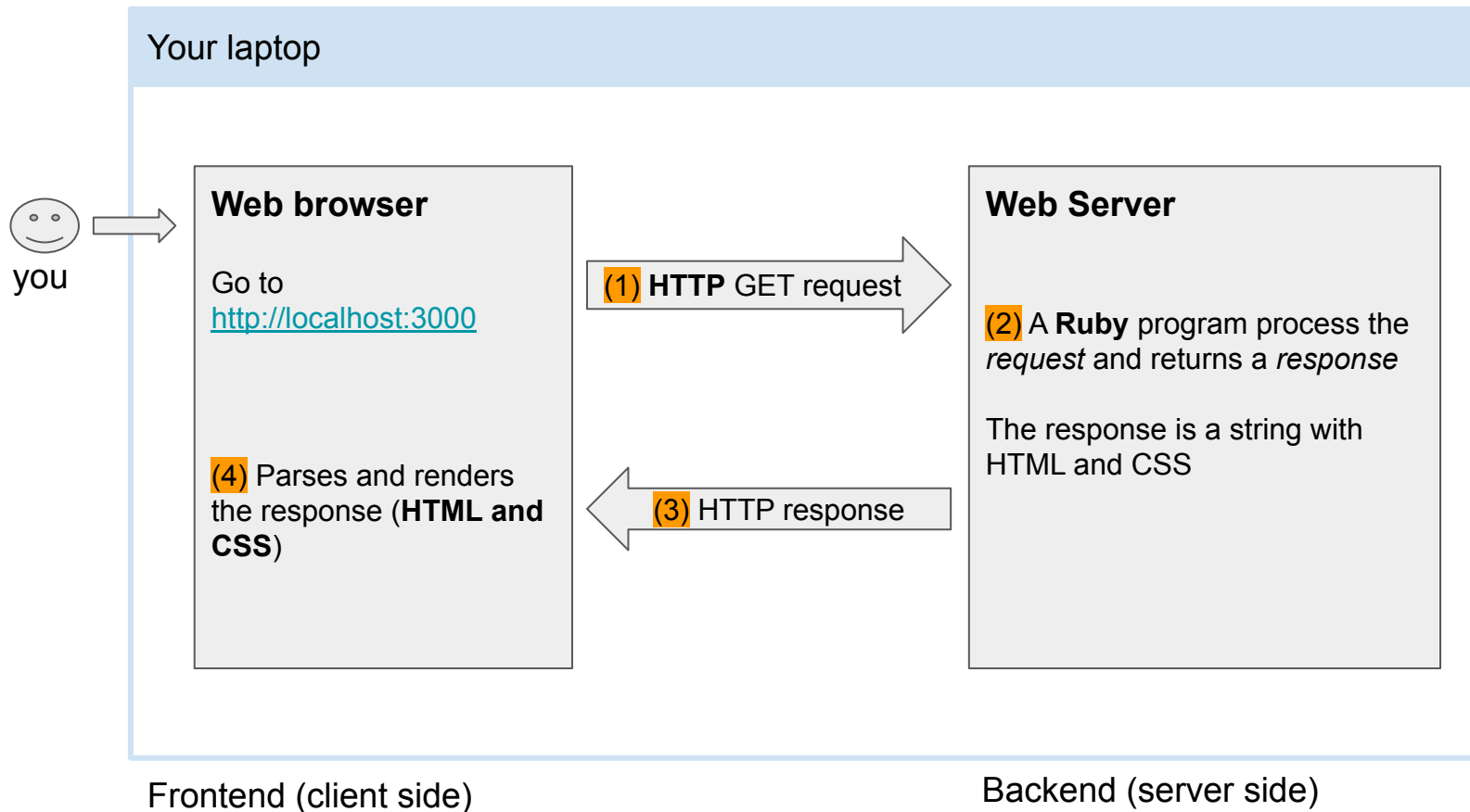
- A network protocol
- Connects the client-side with the server-side

```
<html>
  <head>
    <title>Hello</title>
  </head>
  <body>
    <h1>Hello World</h1>
    <p>This is a web page</p>
  </body>
</html>
```

Web development in a nutshell



Web development in a nutshell (developer laptop edition)



Links for today

These slides: <http://tinyurl.com/web-nutshell>

[GitHub repository home page](#) ⇐ start here

[Required software](#) (VS Code + Docker)

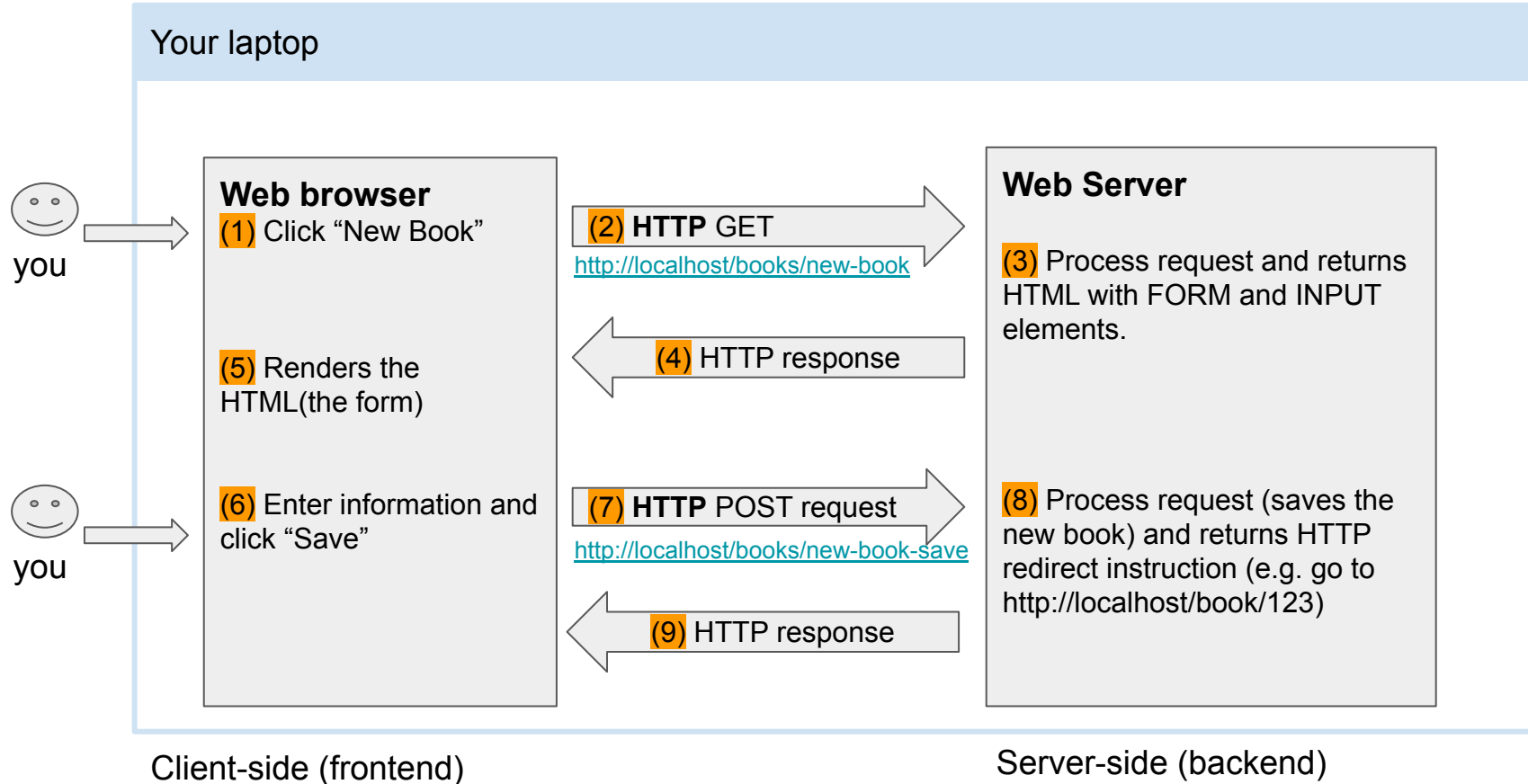
[Downloading the code examples](#)

[tutorial.md](#) (text with all the explanations)

Quiz time!

- What are the two sides of web development?
- What does the browser do?
- Where do we use Ruby?
- What do we do in Ruby?
- What about Python or PHP, where do they go?
- What is a web server?
- What is a full-stack web developer?

Web development in a nutshell (submitting a form)



Quiz time (again!)

- What are views in Sinatra?
- What are routes in Sinatra?
 - Different kind of routes
- What is HTTP GET?
 - What is HTTP POST?
- What is an HTML FORM?
- How do we use JavaScript on the client-side?

Thank you for your time!

Feel free to reach out after the event

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Live Server

This server will only be available while the workshop is taking place

Go to: <http://167.99.147.20:3000/>

- Notice that this URL uses `http` not `https` (i.e. it is not secure)
- `167.99.147.20` is the “IP address” of the server
 - This is the machine where our Ruby program is running
- `3000` is the port where the server is listening for requests
 - Our Ruby program running on the server is bound to this port

Web development in a nutshell (client-side only)

