

**WELCOME TO Q3!!**

**BUT FIRST...**

# **LET'S REFLECT ON Q2**

What are you the most proud of?

# Q2 REFLECTION CONTINUED

- » Take a minute to think about all you learned
- » Are you still unclear about anything?
- » Have any questions?
- » Is there anything you'd like to practice?

**NOW.**

**LET'S GET READY FOR Q3!**

# JANUARY 2018

| SUNDAY | MONDAY                                      | TUESDAY                         | WEDNESDAY                  | THURSDAY              | FRIDAY           | SATURDAY |
|--------|---|---------------------------------|----------------------------|-----------------------|------------------|----------|
|        | 1<br>No School                              | 2<br>Intro to Q3/<br>Wrap-up Q2 | 3<br>OOP<br>Intro to React | 4<br>React Components | 5                | 6        |
| 7      | 8<br>React w/ APIs                          | 9                               | 10<br>React Router         | 11                    | 12               | 13       |
| 14     | Martin Luther King,<br>Jr. Day<br>No School | 16<br>React Testing             | 17<br>Redux (optional)     | 18<br>React Testing   | 19               | 20       |
| 21     | 22<br><=='                                  | 23<br>Unfamiliar                | 24<br>Environments         | 25<br>Week            | 26<br>==>'       | 27       |
| 28     | 29<br>Project Week                          | 30<br>Project Week              | 31<br>Project Week         | 1<br>Project Week     | 2<br>Q3 Projects |          |

# WHAT'S NEW THIS QUARTER!

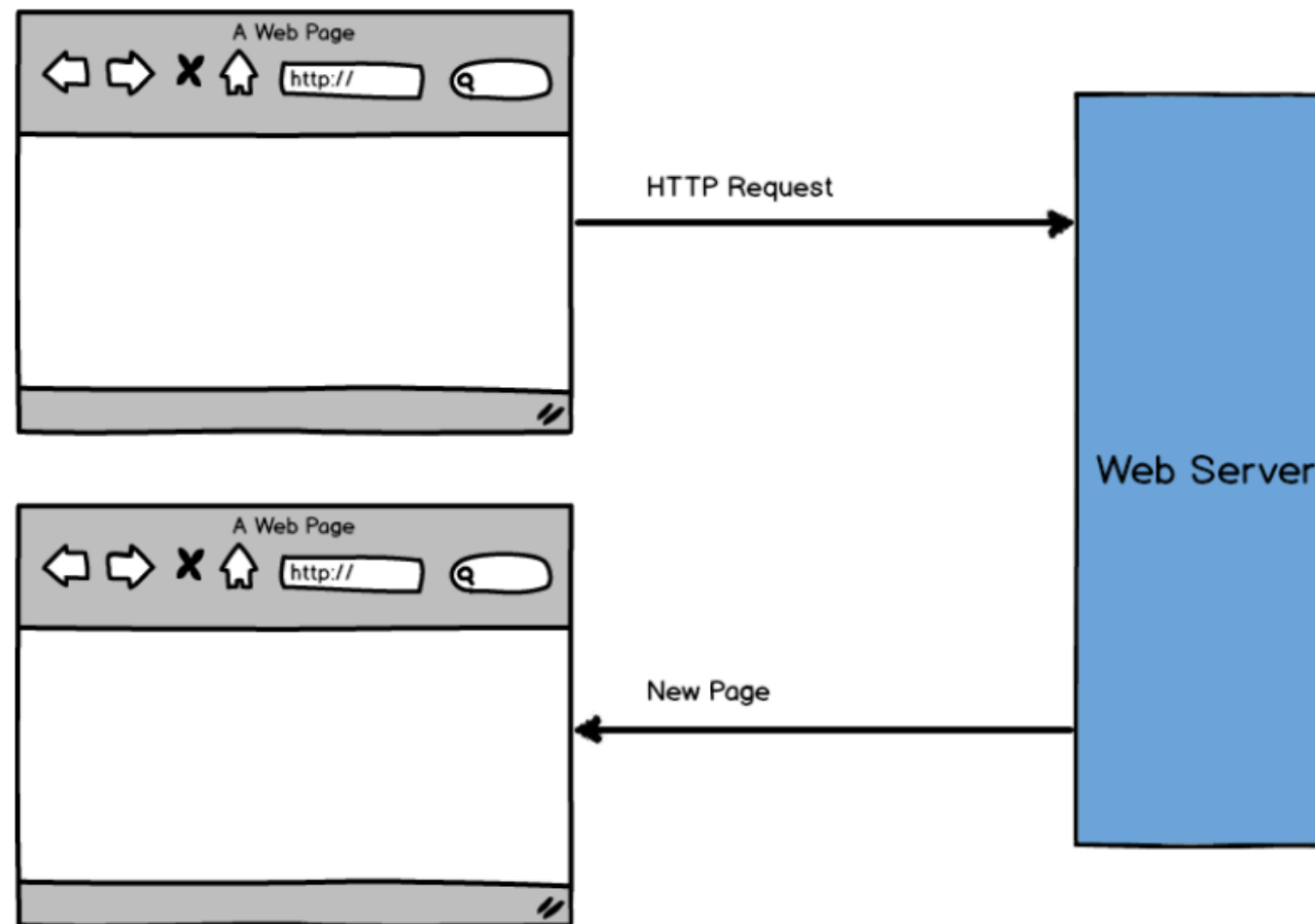
- » Fewer Lessons
- » More Time for Career Services
- » Self Learning - GRIT
- » Single Page Applications

# **SINGLE PAGE APPLICATIONS**



# A BIT OF HISTORY

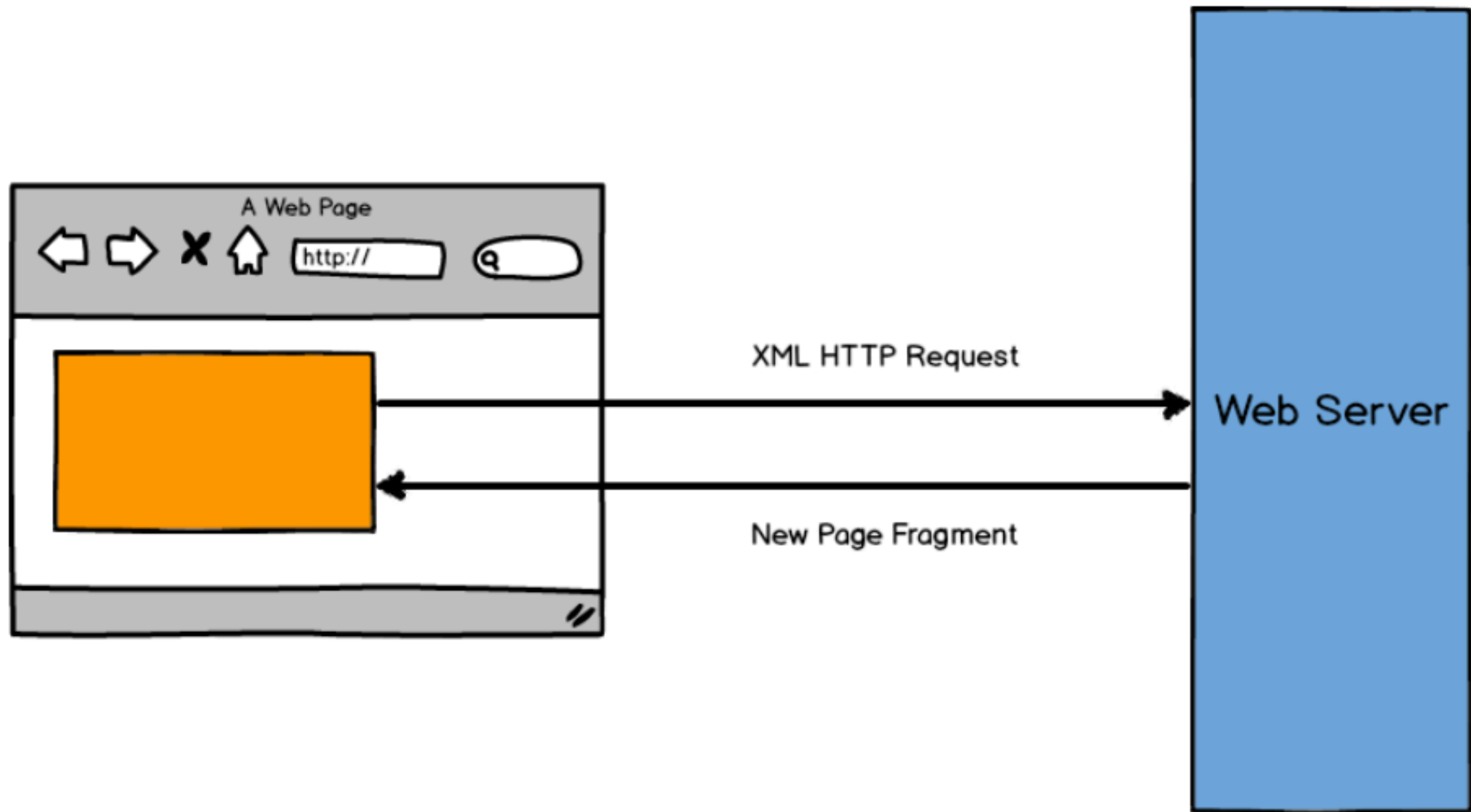
## 1. Static Web Pages and Hyperlinks



Traditional Full-Page Postback Operation

## VARIOUS APPLICATION DEVELOPMENT MODELS WERE BORN

- » Dynamically generated pages
- » Action based on MVC
- » MVC based on components
- » MVC enriched with AJAX



AJAX XMLHttpRequest Partial Rendering

# WHERE WE STAND TODAY

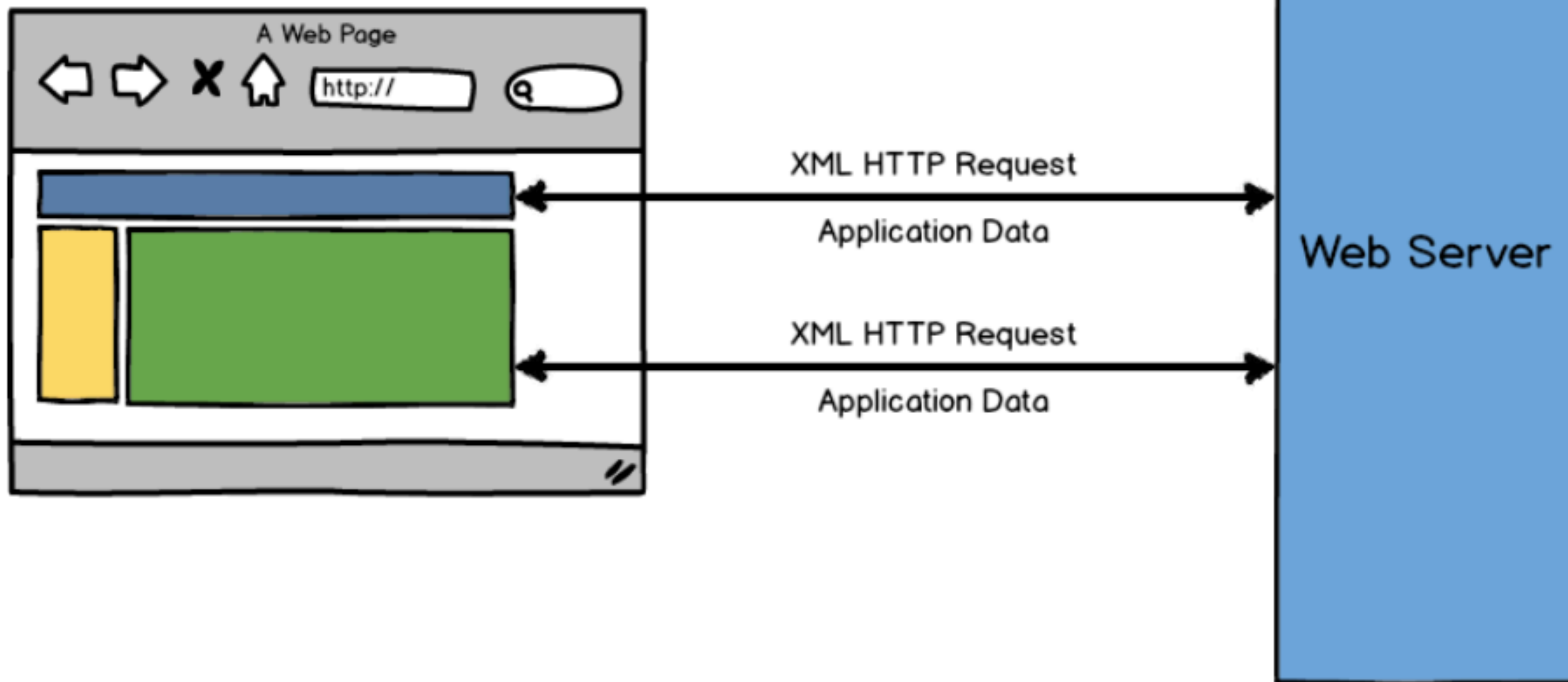
» Server-templating model

# CONS

- » Bad user experience – Continuous page re-rendering has a negative impact on the user experience because network latency cannot be hidden from the user.
- » Poor performance – Unnecessary re-transmission of data over the wire occurs because the page completely reloads on each user interaction.
- » Lack of offline support – A web application 'is alive' as long as there is a server connectivity. If the server connectivity drops, the web

# THUSLY, THE RISE OF SINGLE PAGE APPLICATIONS

In a single-page application, all of the code needed is included in a single-page load. This includes all of the CSS, HTML, and JavaScript. The page does not reload, and it requires dynamic interaction with the Web server.



Single Page Application Elements within a Page

**FRONT END FRAMEWORKS HELP TO BUILD SPAS.**



# ADVANTAGES

1. Efficiency

1. Safety

1. Cost

# MOST POPULAR FRAMEWORKS IN 2017 (IN ORDER OF POPULARITY)

- » ReactJs
- » Angular
- » Vue (sort of)
- » Others... Ember, Meteor, Backbone

## RESOURCES:

- +CodeSchool: Single Page Applications
- +Intro to Single Page Applications
- +SPA vs MPA
- +Server-Side Rendering vs. Client-Side Rendering