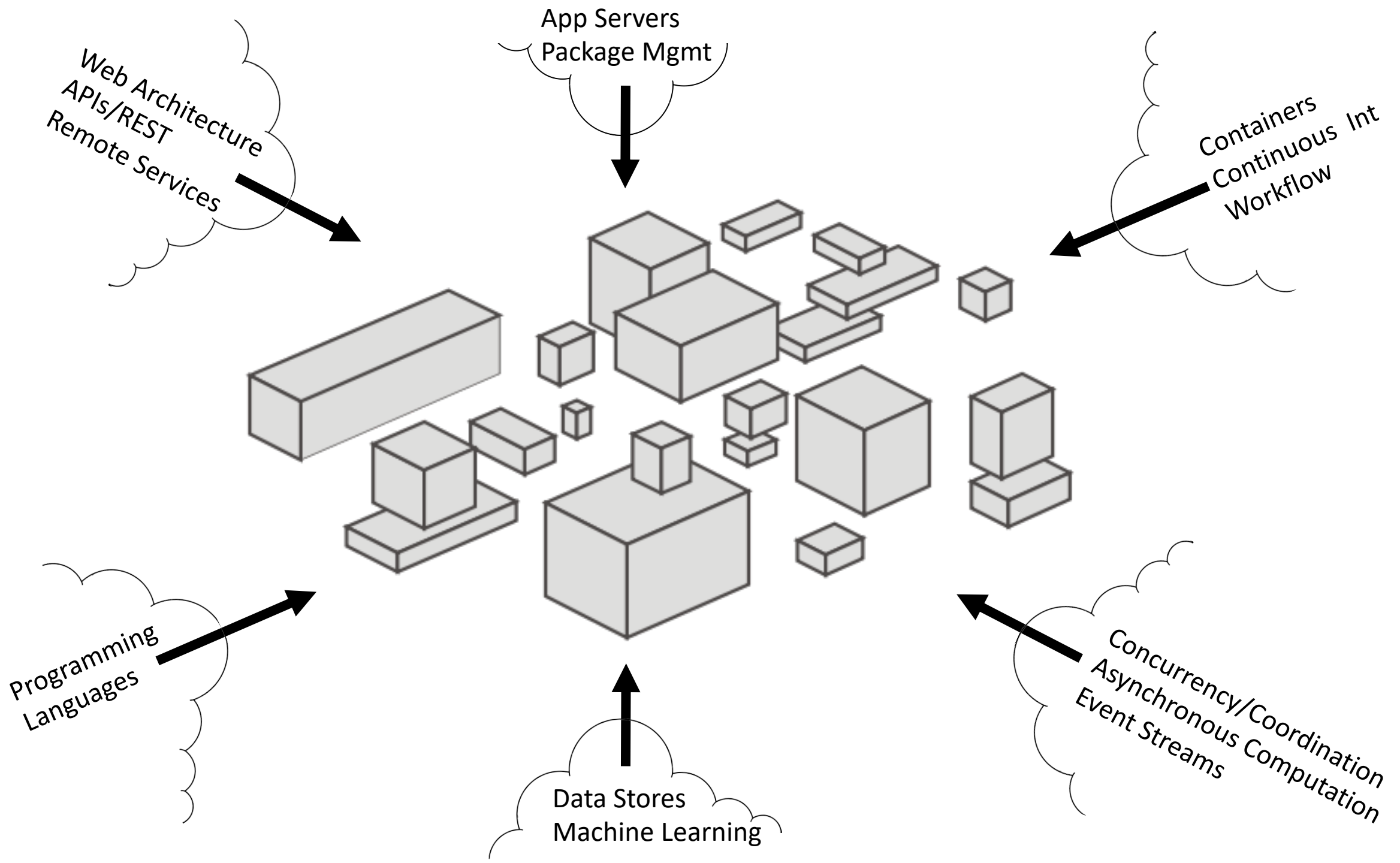
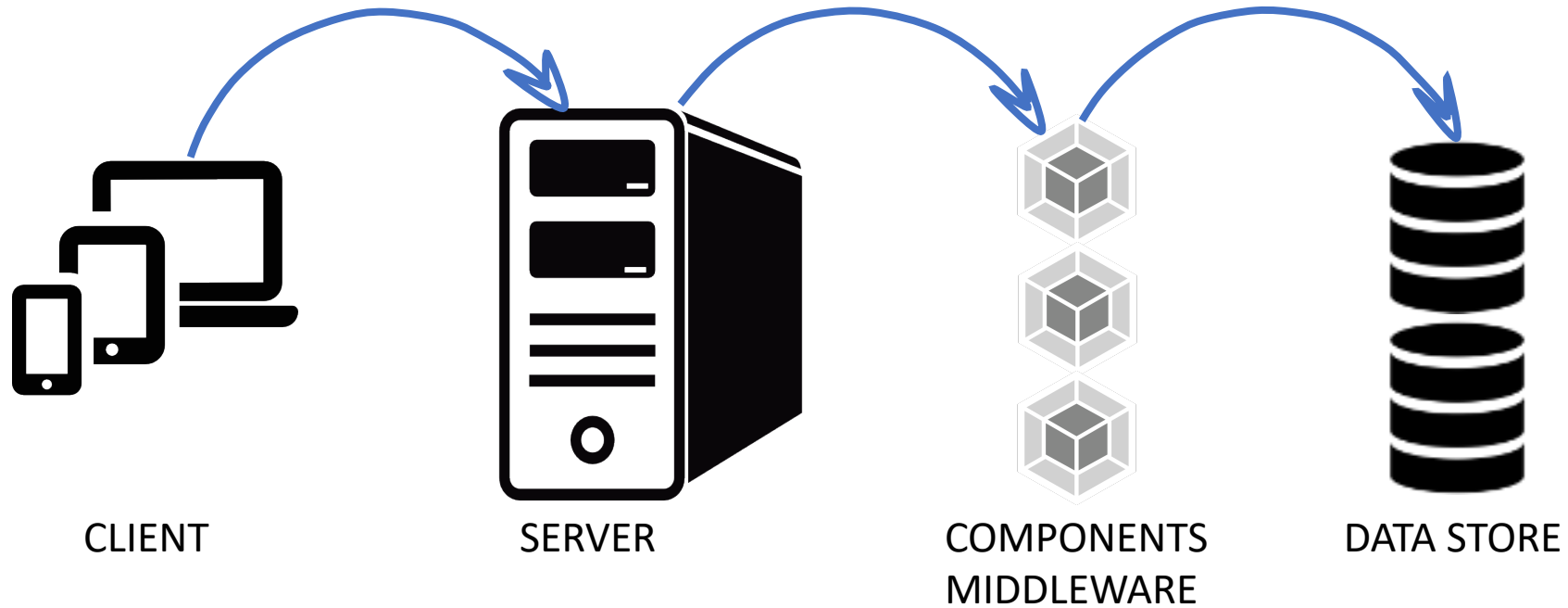


N-Tier Systems

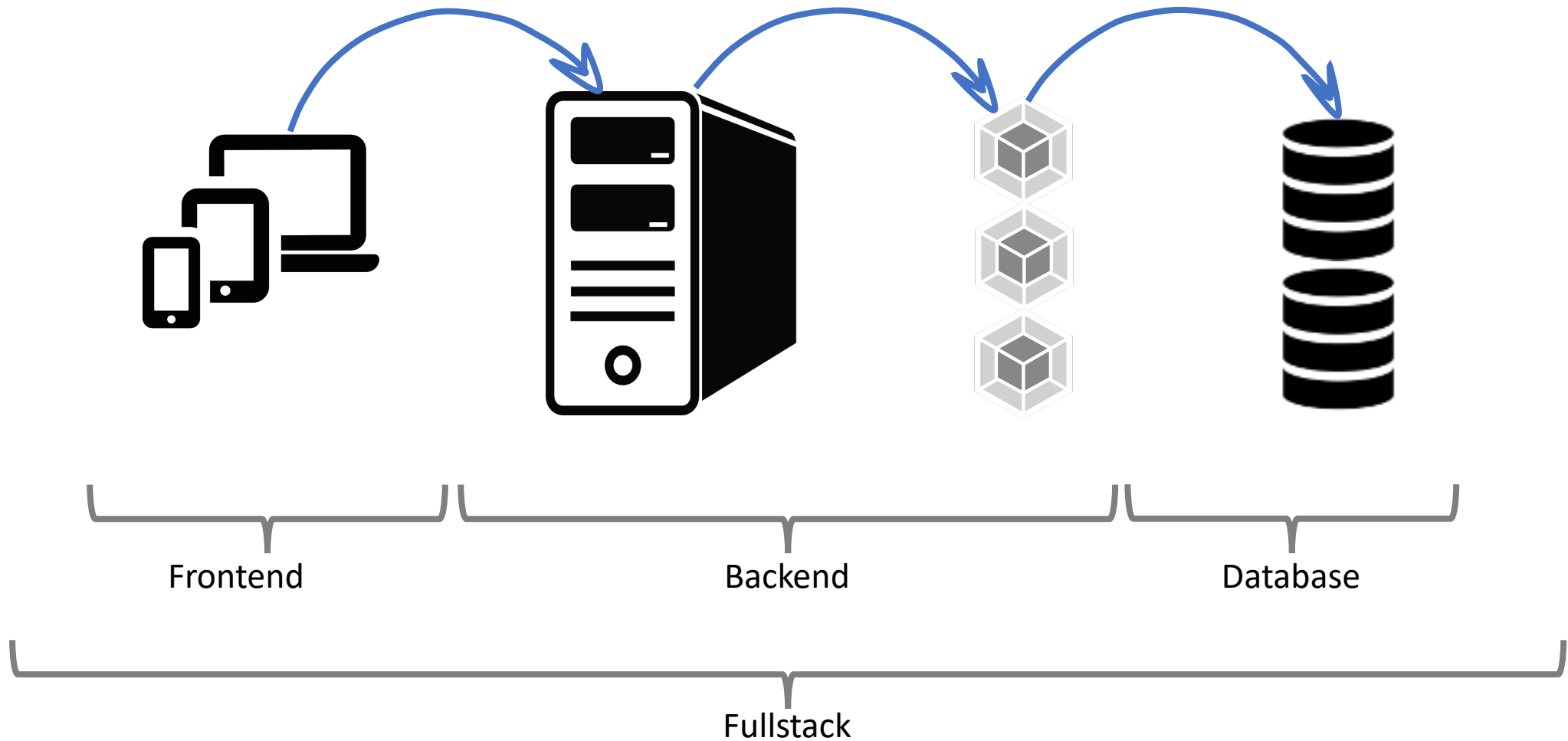
Abel Sanchez, John R Williams



Three Tiers – Practical Handle



Fullstack



FRONTEND



Frontend



The core components – the building blocks



HTML



CSS



JavaScript

HTML



Tags

- Plain text
- Heading
- Paragraph
- Image
- Link

Forms

A web browser window with a single tab titled "Add User". The address bar shows "localhost/". The main content area has the heading "Add User" and a form with two input fields: "First Name" containing "peter" and "Last Name" containing "parker". A blue "SUBMIT" button is located at the bottom right of the form.

Add User

localhost/

Add User

First Name

Last Name

SUBMIT

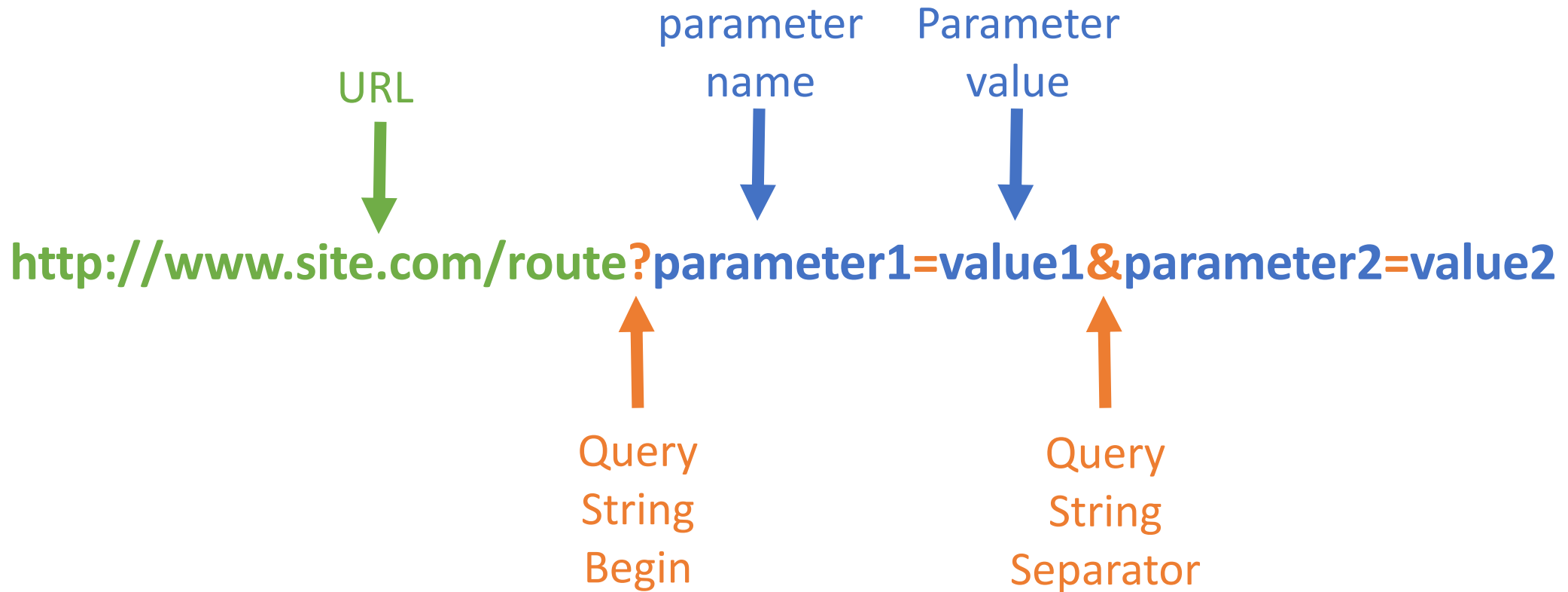
Form components

```
<form action="/YourRoute">  
  <input type="text" name="YourFieldName">  
  <input type="submit">  
</form>
```

Server side

```
inspect = {}  
inspect['args'] = request.args  
inspect['form'] = request.form  
inspect['values'] = request.values  
inspect['first'] = request.form['first']  
inspect['last'] = request.form['last']  
return jsonify(inspect)
```

URL Query String



Server side

```
inspect['args'] = request.args
```



CREATE

READ

UPDATE

DELETE

C

R

U

D

Buttons

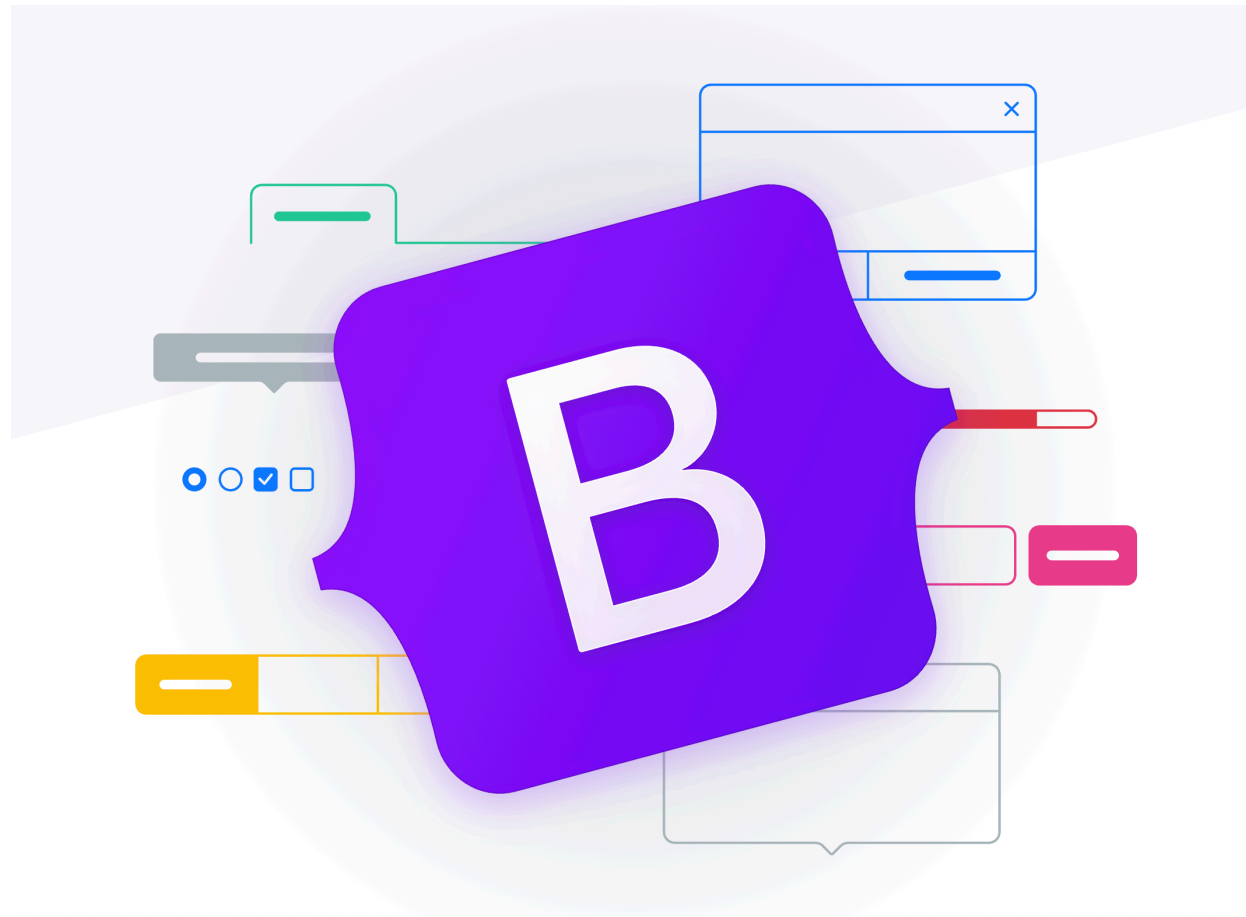
Route

Parameters

```
<a href="/route1?key1=value1&key2=value2">  
    
</a>  
<a href="/route2?key1=value1&key2=value2">  
    
</a>
```



Styling by hand is too hard



<https://getbootstrap.com/>

Menu



CREATE



READ



UPDATE



DELETE