

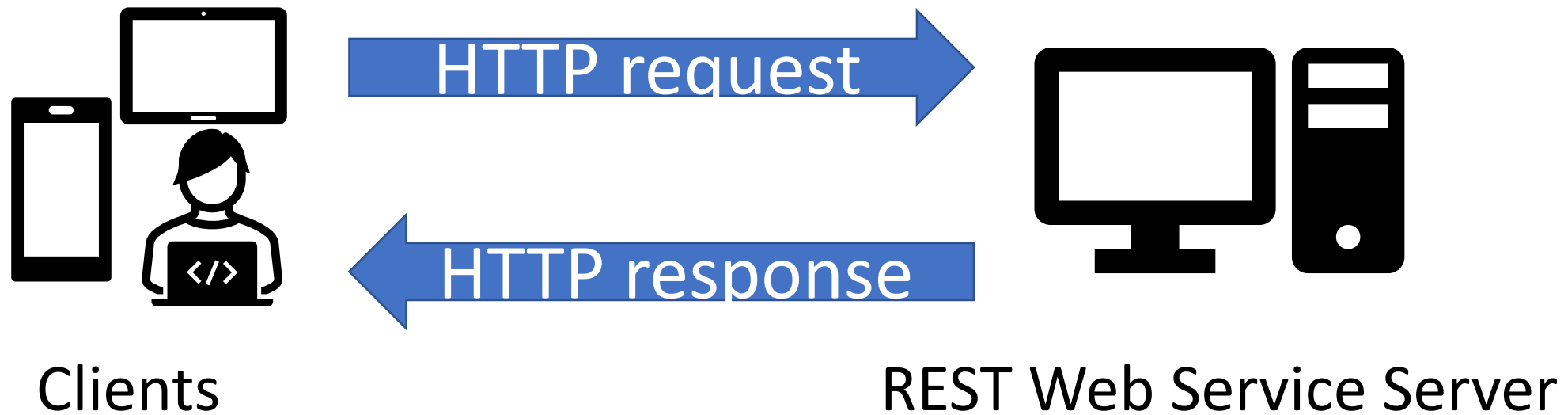


REST API Architecture

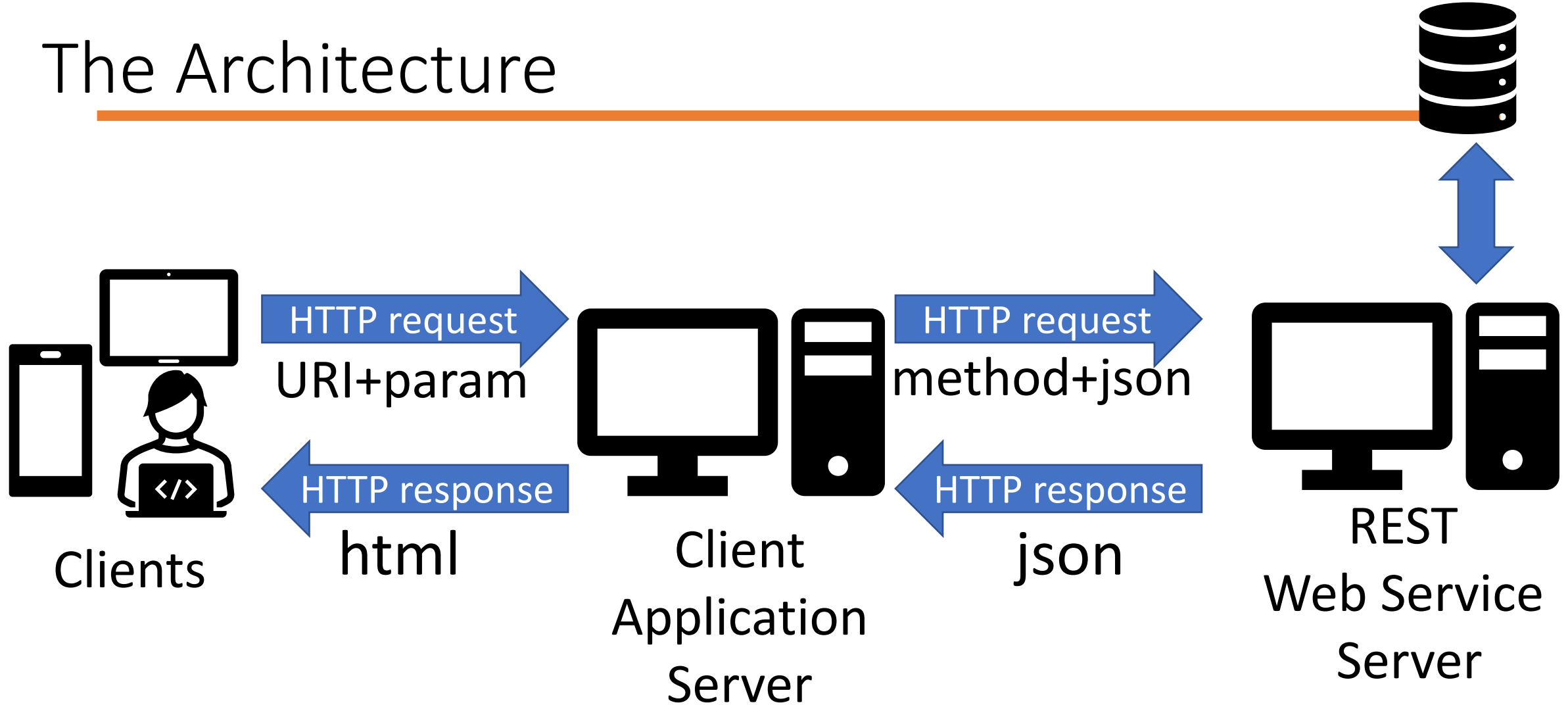
REST API

- **R**epresentational **S**tate **T**ransfer
- guides the design and development of a **client–server** architecture for the **World Wide Web** by using a **stateless** protocol.
- emphasises the **scalability** of interactions between components, **uniform interfaces**, **independent deployment** of components, and the creation of a layered architecture to facilitate caching components to **reduce** user-perceived **latency**, enforce **security**, and **encapsulate legacy systems**.
- REST has been employed throughout the software industry.
- based on **HTTP methods** to access resources via **URL-encoded parameters** and the use of **JSON** or **XML** to transmit data.
- It provides operations (**HTTP methods**) such as **GET**, **POST**, **PUT**, and **DELETE**.

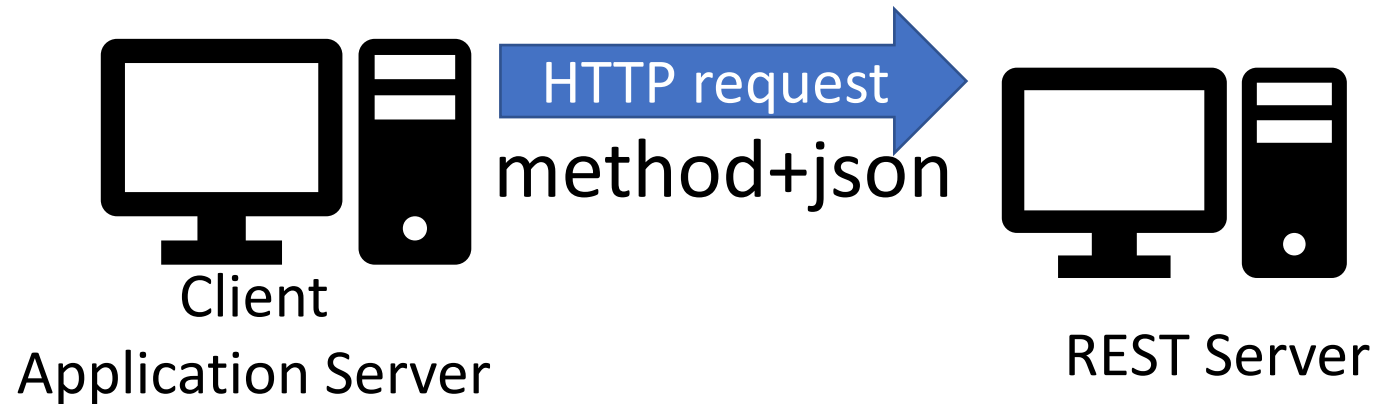
The Architecture



The Architecture

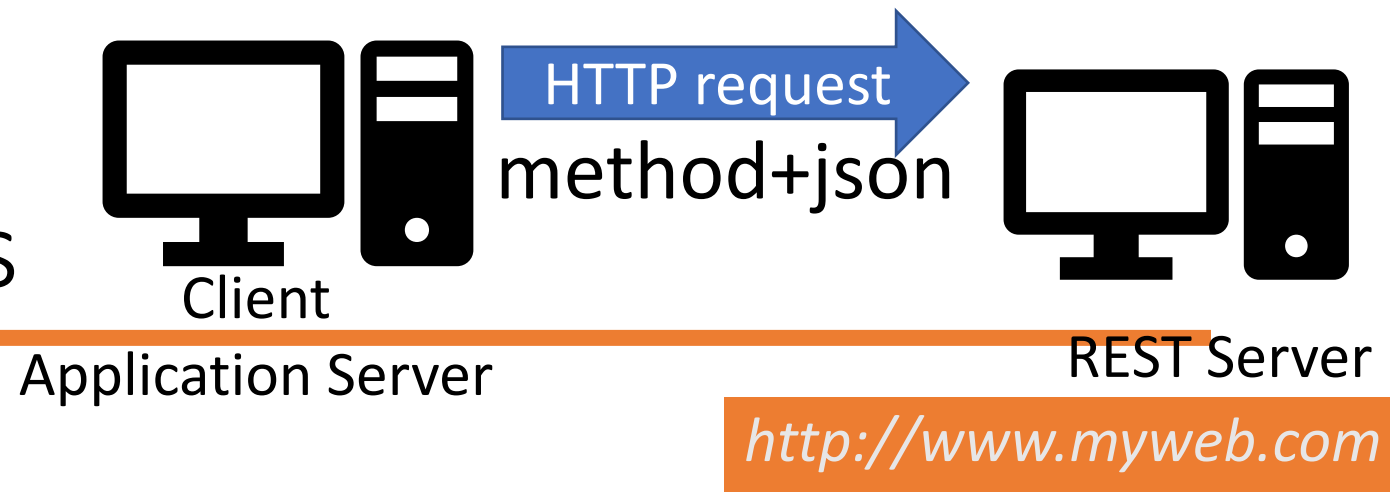


HTTP Request Methods



GET	Retrieve Resource
POST	Submit Resource
PUT/PATCH	Update Resource
DELETE	Delete/Destroy Resource

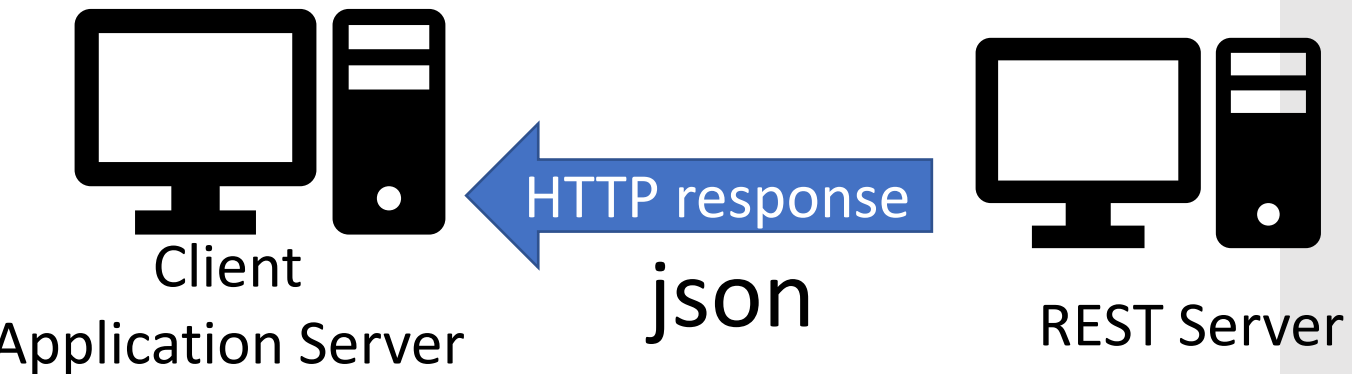
RESTful API Standards



<http://www.myweb.com>

GET	/resources	Get all resources
GET	/resources/1	Get one resource with ID of 1
POST	/resources	Add a resource
PUT	/resources/1	Update the resource with ID of 1
DELETE	/resources/1	Delete the resource with ID of 1

HTTP response status codes



<https://developer.mozilla.org/en-US/docs/Web/HTTP/Status>

- Informational responses (100–199)
- Successful responses (200–299)
 - 200 Success
 - 201 Created
 - 204 No Content
- Redirects (300–399)
 - 304 Not Modified
- Client errors (400–499)
 - 400 Bad Request
 - 401 Unauthorized
 - 404 Not Found
- Server errors (500–599)
 - 500 Internal Server Error

https://rapidapi.com/

