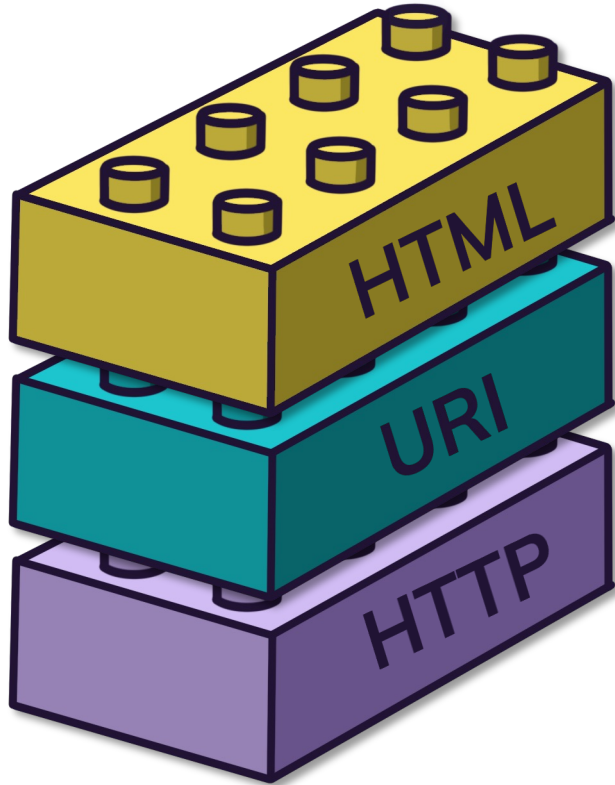




Identifier and Web Locations

How to Identify and Retrieve Data on the World Wide Web

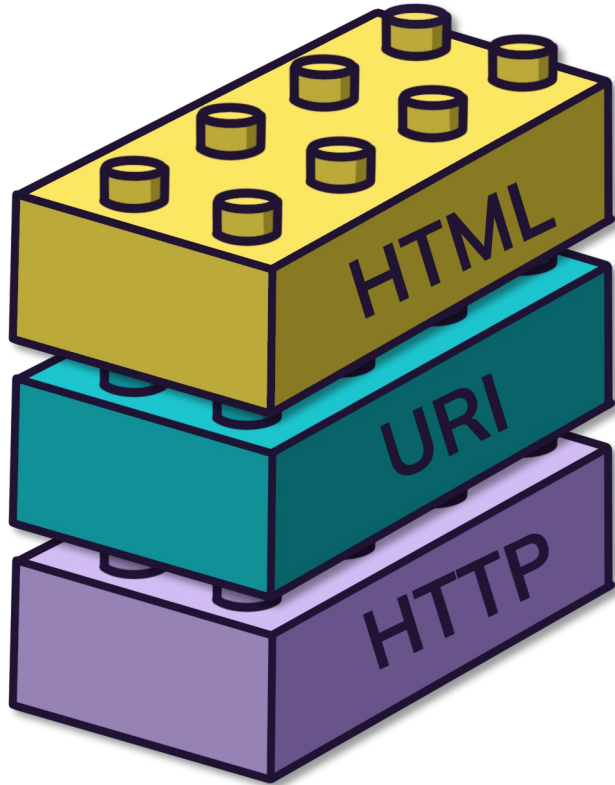
Fundamentals of Scientific Metadata: Why Context Matters



HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol

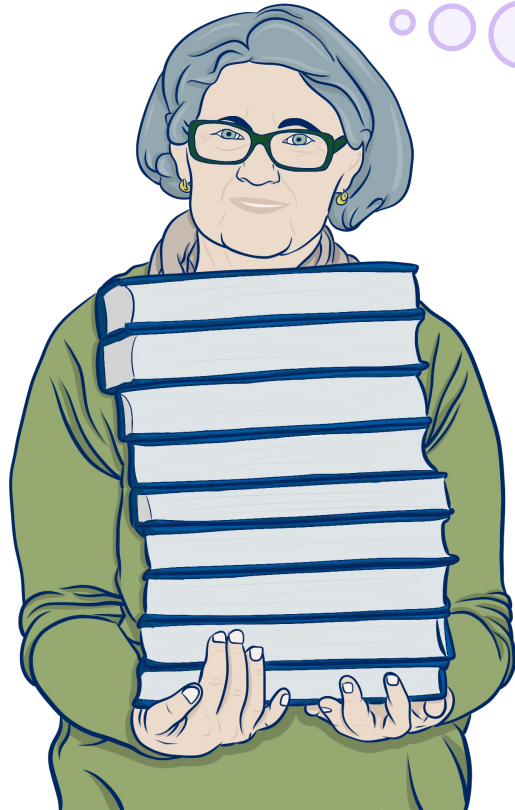


HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol

Unique Identifier - Librarian



Unique Identifier - Librarian



Unique Identifier – Molecular Biology





Unique Identifier – Molecular Biology



Unique Identifier



- globally unique identification
- central, world or community wide registration
- dereferenceable, unambiguous



Identifier in your
research area



Web Identifier





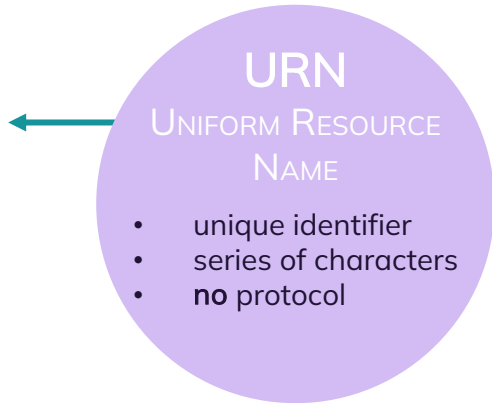
URN

UNIFORM RESOURCE
NAME

- unique identifier
- series of characters
- **no** protocol

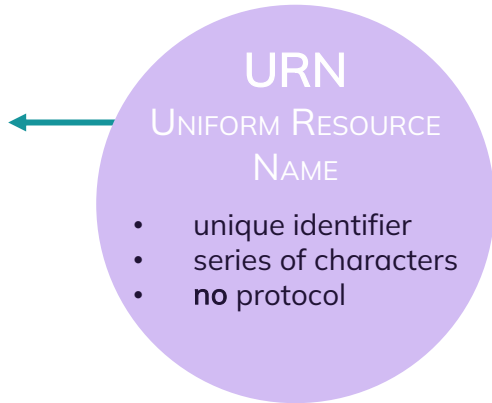


URN





URN





URN



URN

UNIFORM RESOURCE
NAME

- unique identifier
- series of characters
- **no** protocol


URL

UNIFORM RESOURCE
LOCATOR

- address
- series of characters
- comm. protocol



URN



`urn:isbn:
9780262528511`

URN

UNIFORM RESOURCE
NAME

- unique identifier
- series of characters
- **no** protocol

URL

UNIFORM RESOURCE
LOCATOR

- address
- series of characters
- comm. protocol

URL




`https://orcid.org
/0000-0003-3043-
5657`



`https://arabidops
is.org/servlets/T
airObject?id=1360
48&type=locus`



URN



`urn:isbn:
9780262528511`

URN

UNIFORM RESOURCE
NAME


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URL


UNIFORM RESOURCE
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URL



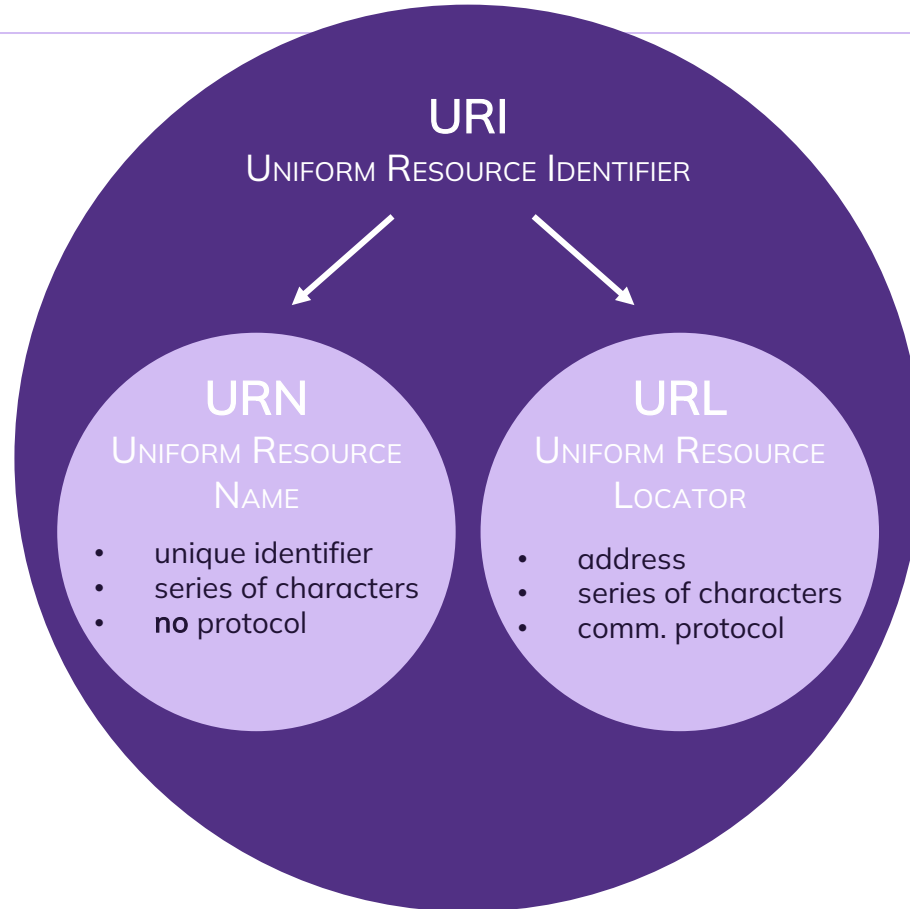
`https://orcid.org
/0000-0003-3043-
5657`




`https://arabidops
is.org/servlets/T
airObject?id=1360
48&type=locus`



URN – URL – URI



URN



`urn:isbn:
9780262528511`

URL



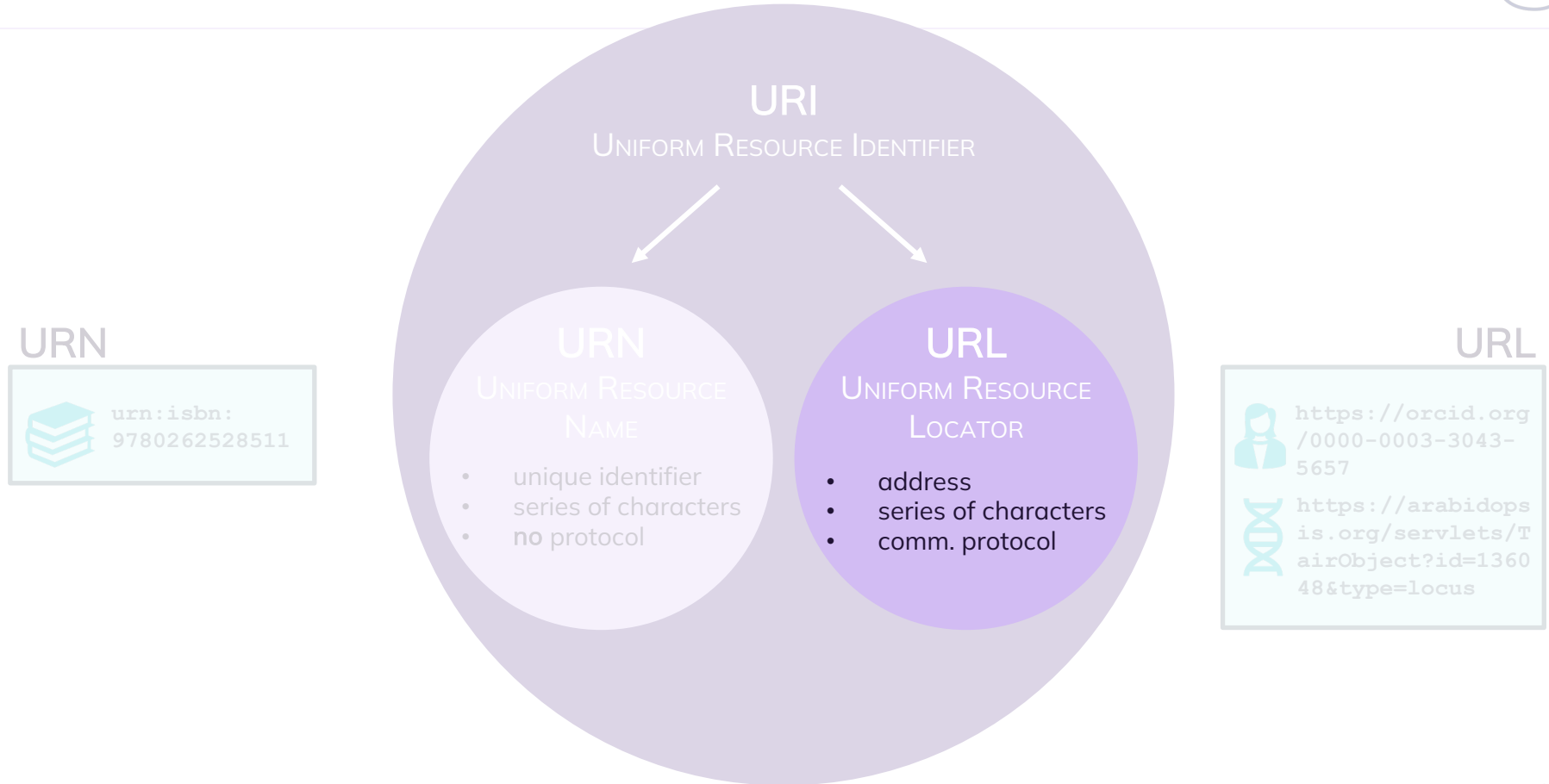
`https://orcid.org
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5657`



`https://arabidops
is.org/servlets/T
airObject?id=1360
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URN – URL – URI



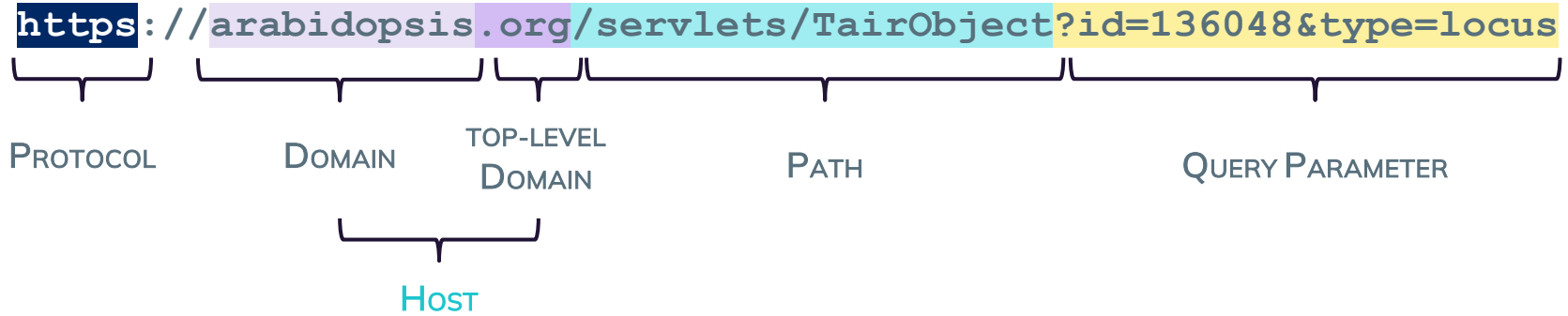
URL structure

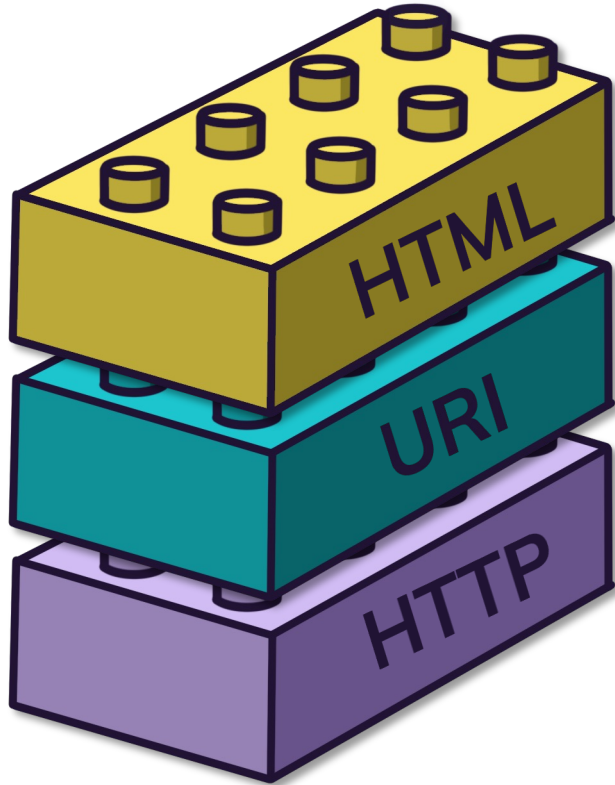


`https://arabidopsis.org/servlets/TairObject?id=136048&type=locus`



URL structure





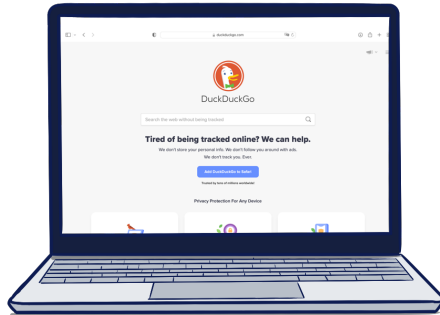
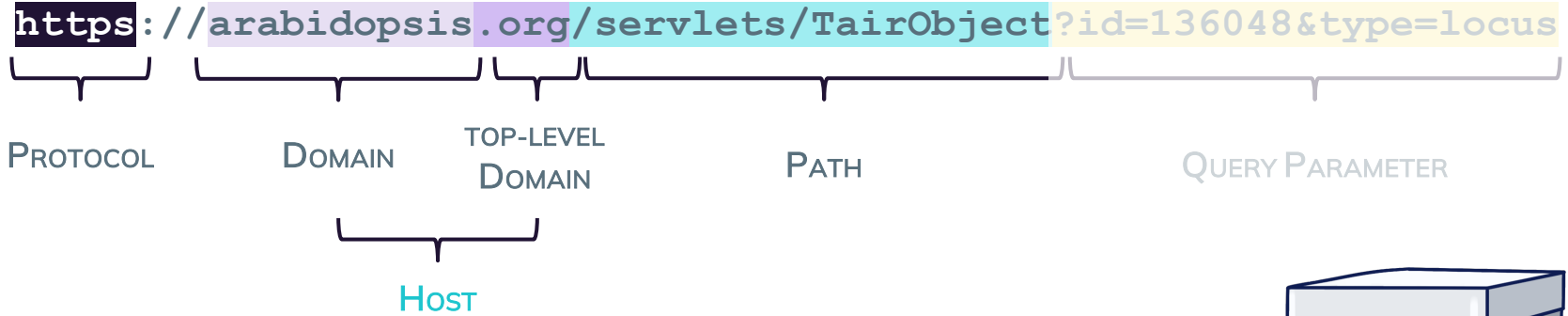
HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol



HTTP request



HTTP Request

`GET Path HTTP/1.0`

`Host: Host`

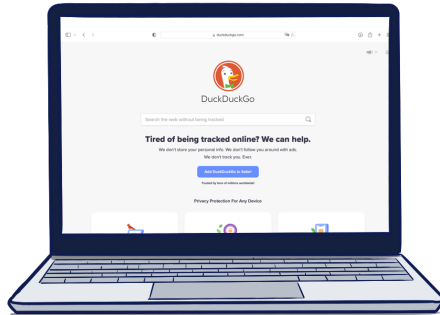
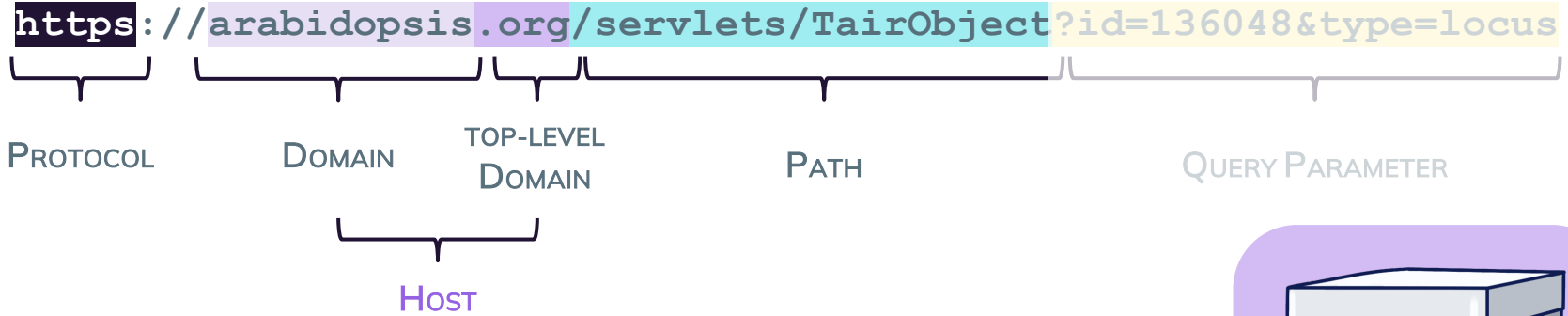
`User-Agent: Mozilla`

`...`





HTTP request

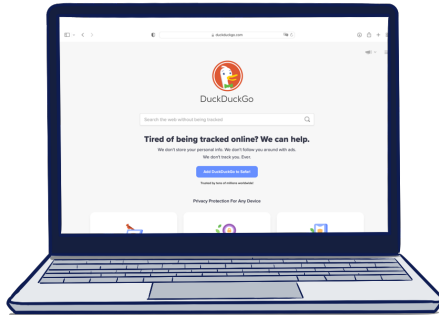


HTTP Request

```
GET Path HTTP/1.0  
  
Host: Host  
User-Agent: Mozilla  
...
```



HTTP request

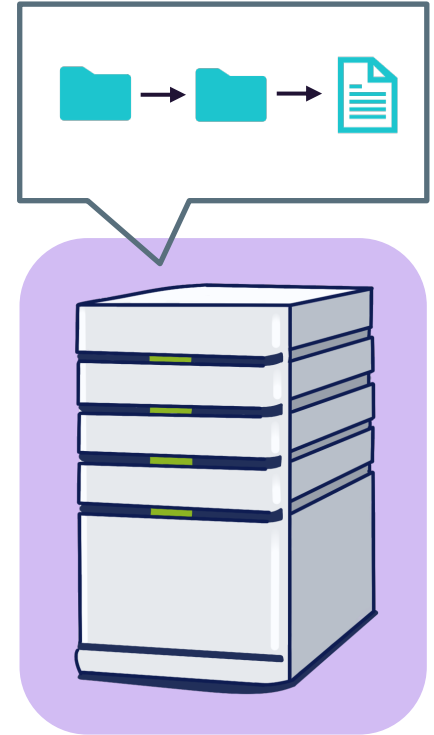


```
GET Path HTTP/1.0
```

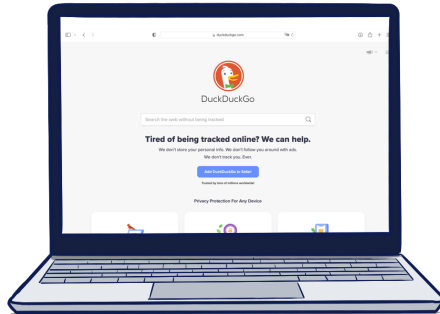
```
Host: Host
```

```
User-Agent: Mozilla
```

```
...
```



HTTP response



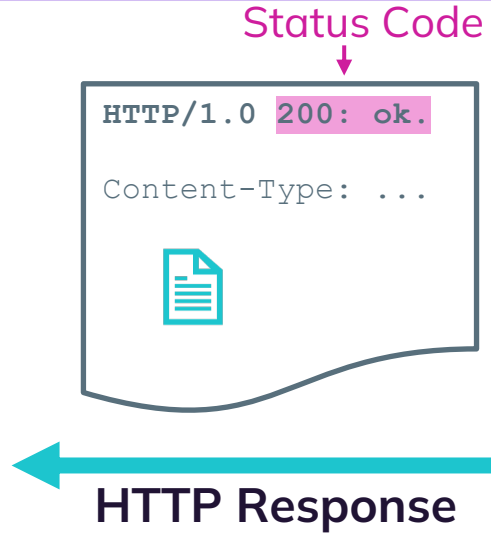
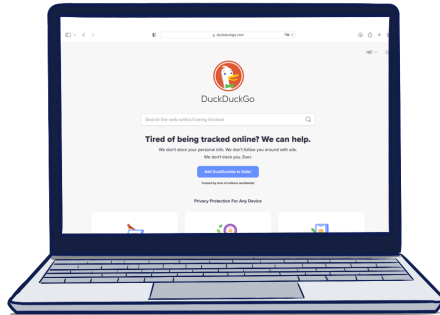
```
HTTP/1.0 200: ok.  
Content-Type: ...
```

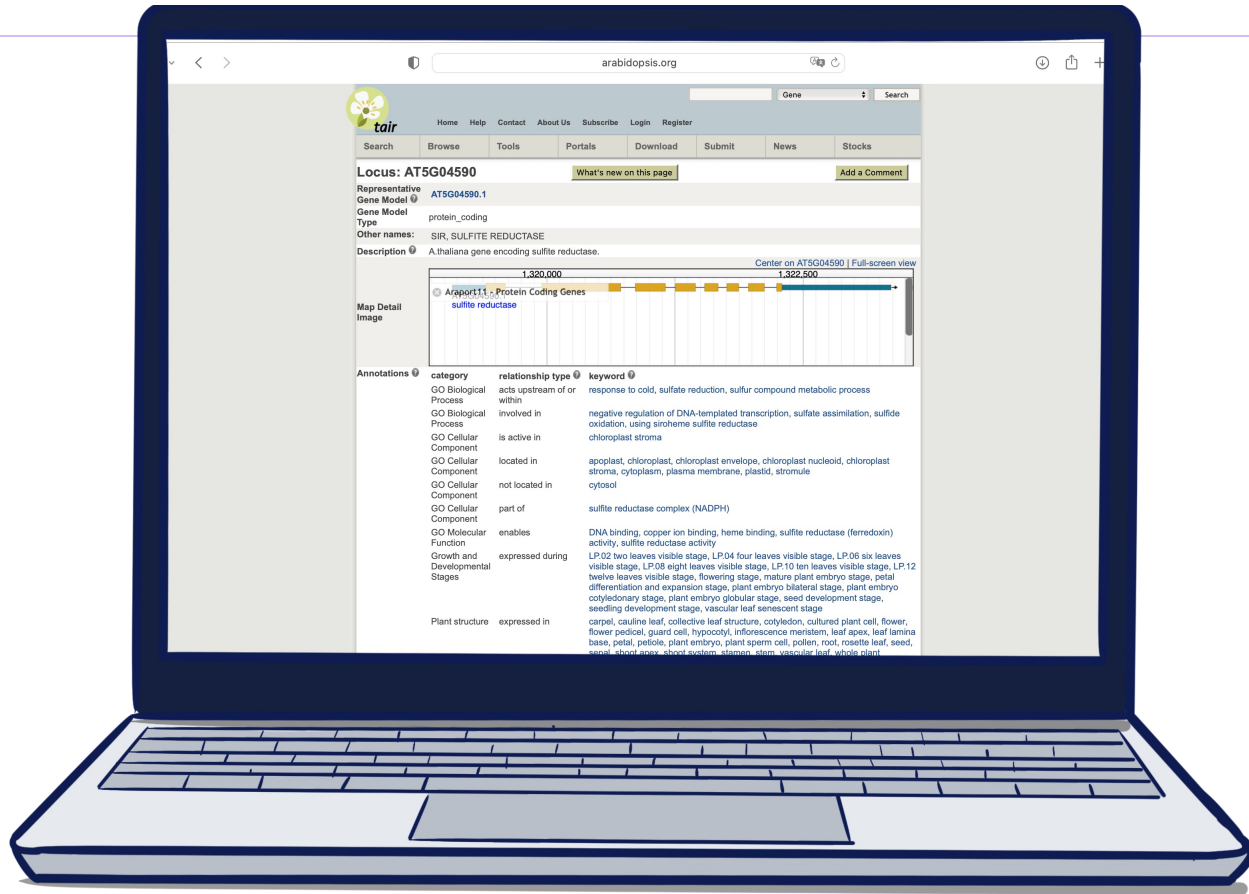


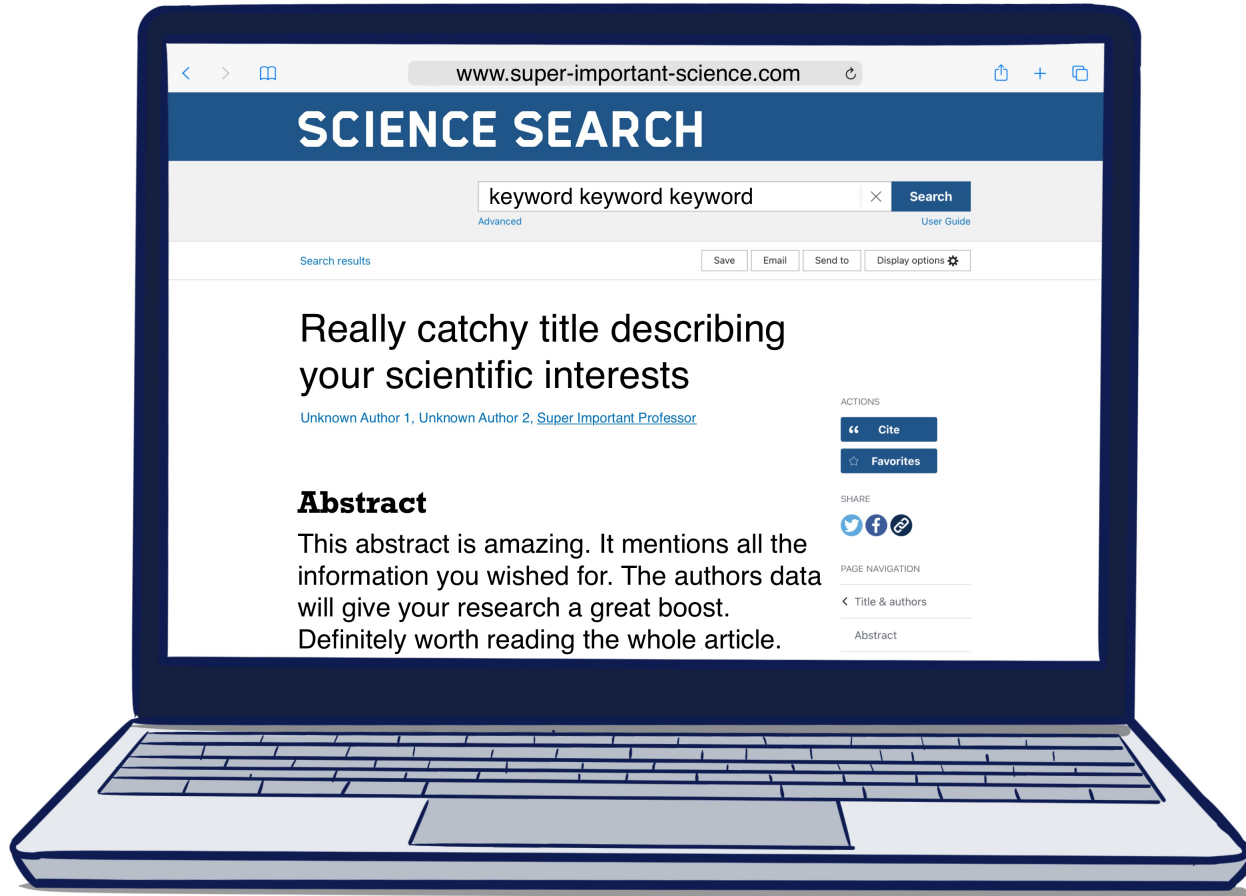
← HTTP Response

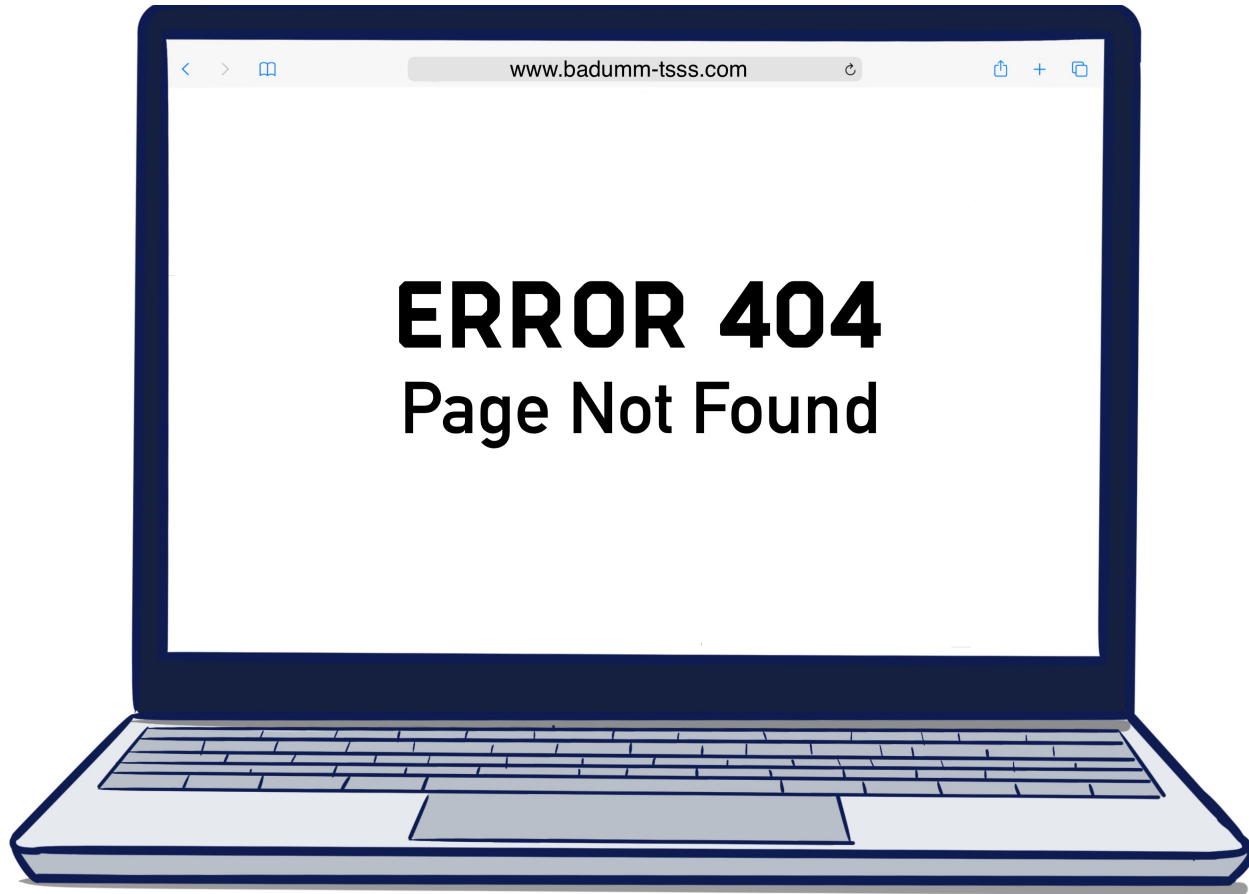


HTTP response











HTTP request

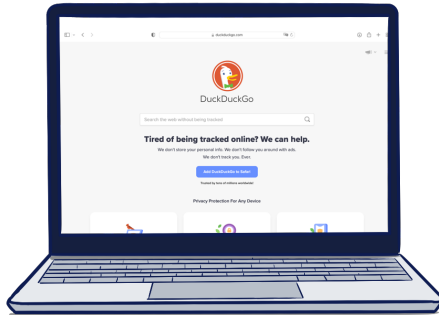
`https://arabidopsis.org/servlets/TairObject?id=136048&type=locus`

PROTOCOL

HOST

PATH

QUERY PARAMETER



HTTP Request

`GET Path HTTP/1.0`

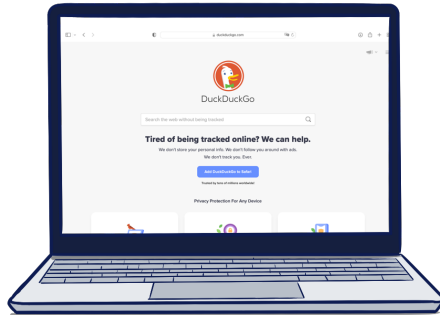
`Host: Host`

`User-Agent: Mozilla`

`...`



ERROR 404: Not Found

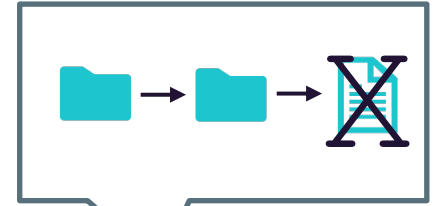


```
GET Path HTTP/1.0
```

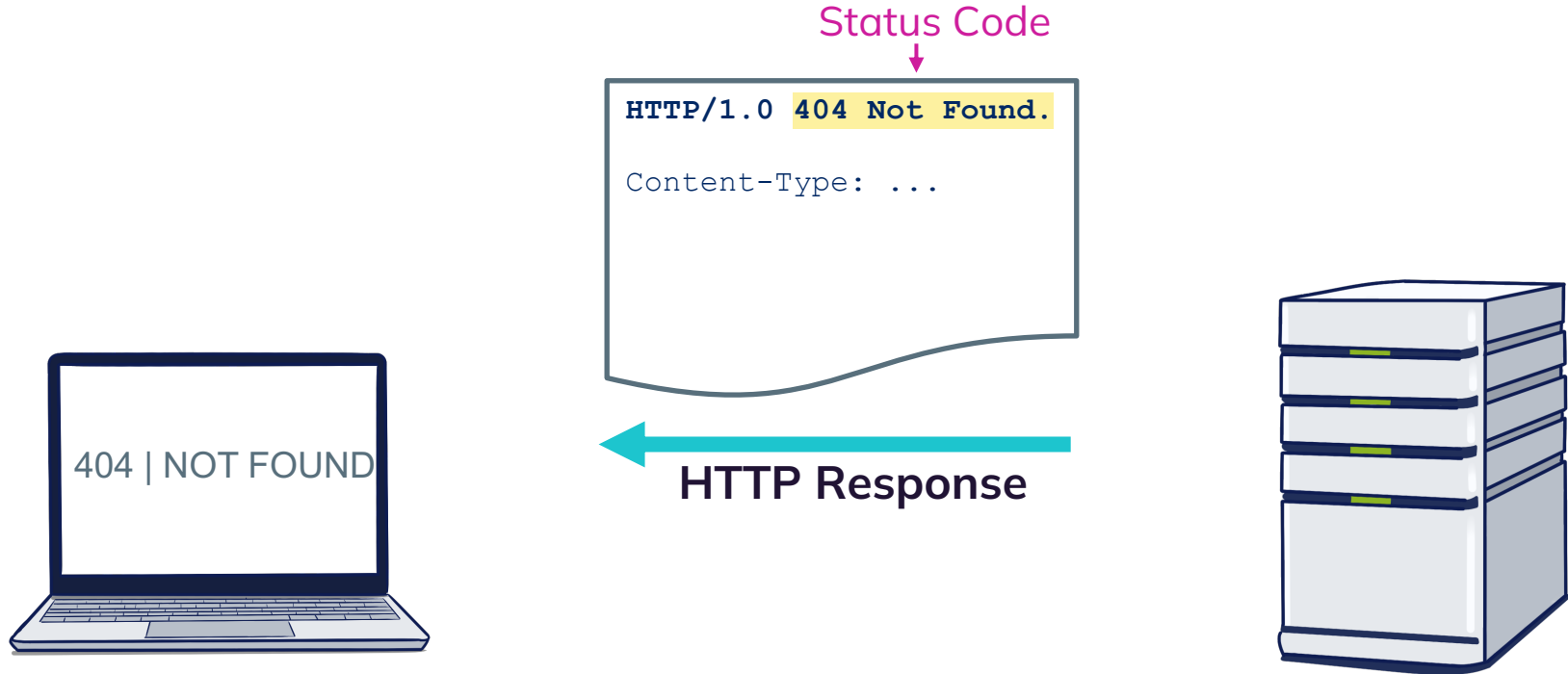
```
Host: Host
```

```
User-Agent: Mozilla
```

```
...
```



ERROR 404: Not Found



Error 404

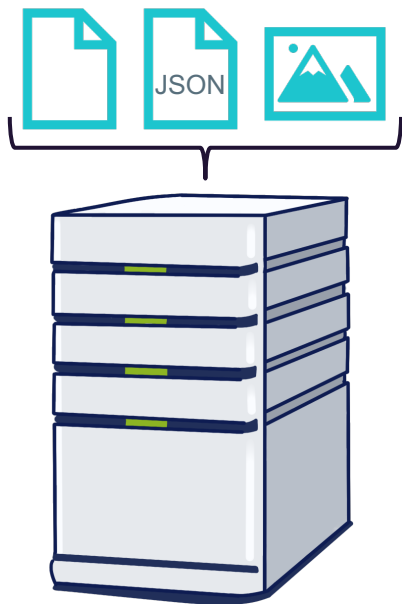
Demonstration





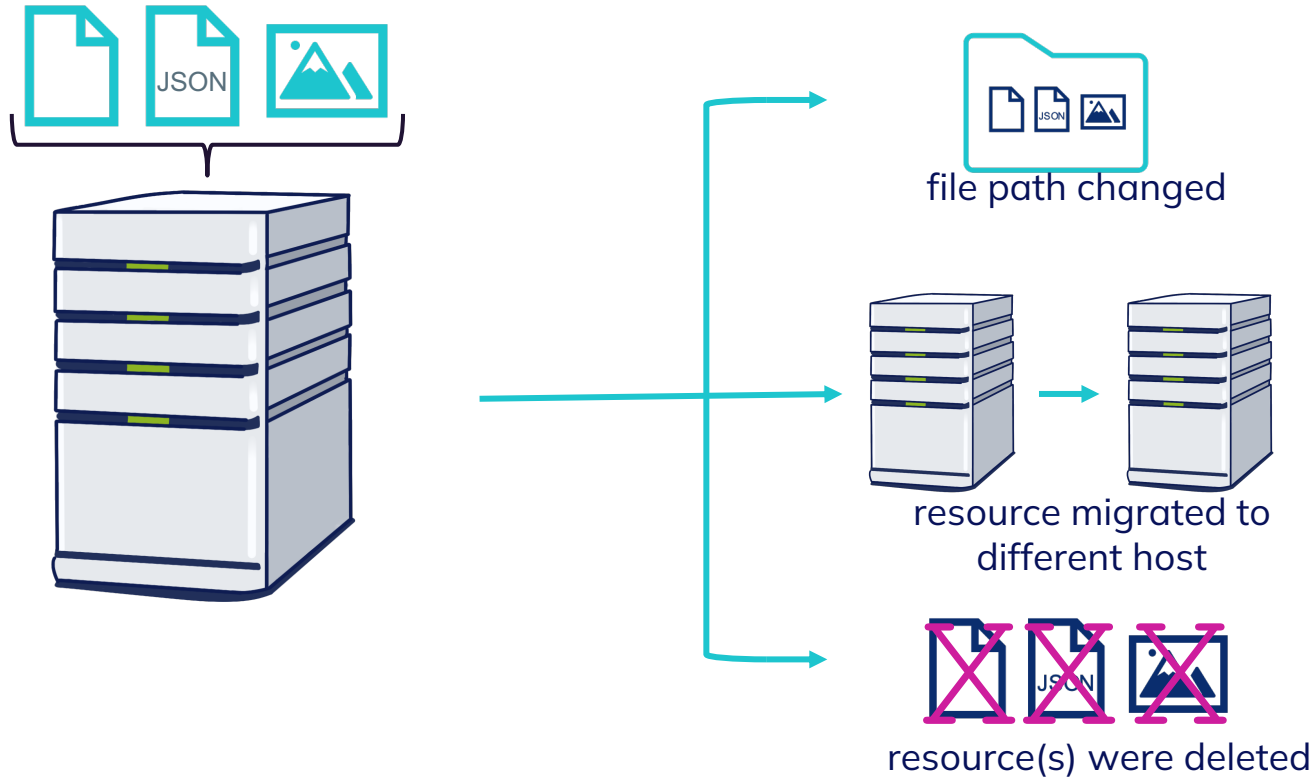


ERROR 404: Reasons for link rot





ERROR 404: Reasons for link rot



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Why Context Matters**

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