

Module 7

Routing In Depth

Outline

- Understand route methods
- Understand route paths
- Understand route params

Route Methods

- A route method is derived from one of the HTTP methods, and is attached to an instance of the express class
- HTTP methods: **get, post, put, delete, options** etc.,

Route Paths

- **Route paths**, in combination with a request method, define the **endpoints** at which requests can be made. Route paths can be **strings, string patterns, or regular expressions**.

Route Paths - Examples

- /
- /products
- /products/SR?E1 (matches /products/SE1, /products/SRE1)
- /products/SR+E1 (matches /products/SRE1, /products/SRRE1, /products/SRRRE1)
- /products/S(RP)?E1 (matches /products/SE1, /products/SRPE1)
- /products/S*E1 (matches /products/SANYTHINHEREE1)
- /products/*.FG\$/ (matches /products/EFG,/products/ANFG etc.,)

Route Params

- Route parameters are named URL segments that are used to capture the values specified at their position in the URL
- The captured values are populated in the **req.params** object, with the name of the route parameter specified in the path as their respective keys

Route Params - Example

```
app.get('/products/:pid/offers/:oid', function (req, res) {  
    res.send(req.params)  
})
```

Route path: /products/:pid/offers/:oid

Request URL: http://localhost:3000/products/34/offers/8989

req.params: { "pid": "34", "oid": "8989" }

Optional Route Params (query params)

- Route parameters are mandatory
- To make parameters optional use query string

Optional Route Params - Example

```
app.get('/products', function (req, res) {  
    res.send(req.query)  
})
```

Route path: /products

Request URL: http://localhost:3000/products?id=100&type=o

req.query: { "id": "100", "type": "o" }

Route Handlers

- A function that handles the request (in other terms middleware)

```
app.get('/users/:userId/books/:bookId', function (req, res) {  
  res.send(req.params)  
})
```

Check your knowledge

- Which character is used to define route parameter?
- Is it legal to have multiple route params in the same route path?
- Express has support for regex to define route paths
- Route handlers can be termed as middleware, true or false?
- How to define optional parameters in the url?
- Planning routes is a vital part of express development, true or false?