## TOC

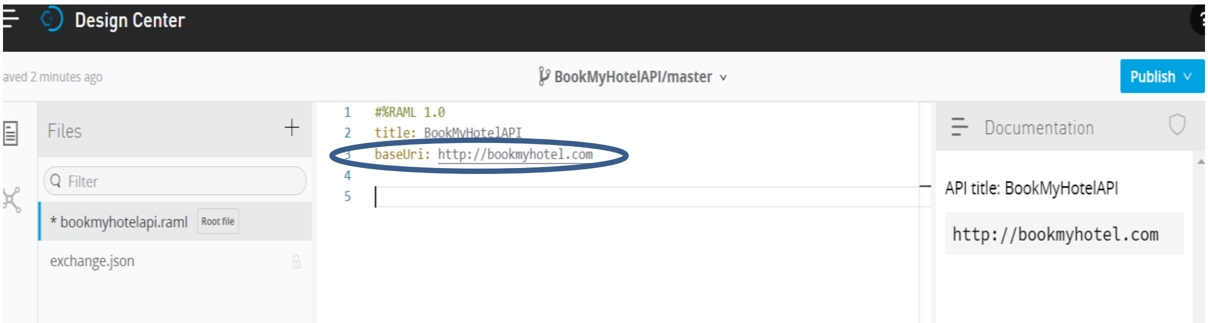
## LAB : Define baseUri ,Resources, Methods, Media Type and Query Params in RAML spec

In this lab you will -

a) Define Base uri
b) Define Resources in RAML Spec
c) Define methods for Resources
d) Define Media Type
e) Define Query Params

### Step 1 – Define base uri

1. Go to Design Center
2. Click on BookMyHotelAPI project
3. In root RAML specification, specify baseUri as shown below :-

4. 

```
#%RAML 1.0
title: BookMyHotelAPI
baseUri: http://bookmyhotel.com
```

API title: BookMyHotelAPI

`http://bookmyhotel.com`

**Congratulations, you have completed step 1.**

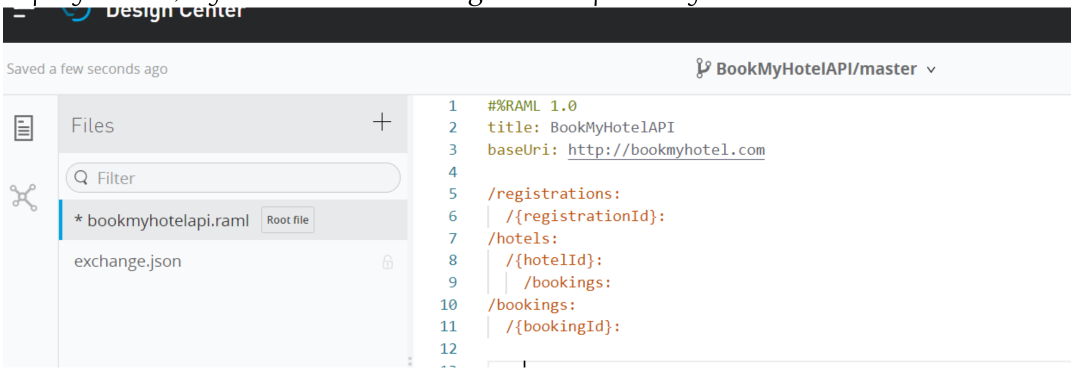
## Step 2 – Define Resources using their resource path

1. Following are the resources and their resource paths :-

| Resource | Resource Path |
|---|---|
| Registrations | /registrations |
| Hotels | /hotels |
| Bookings | /bookings |
| Registration | /registrations/{registrationId} |
| Hotel | /hotels/{hotelId} |
| Booking | /bookings/{bookingId} |

   a.
   b. Registrations, Hotels and Bookings are **collection resources**
   c. Registration, Hotel and Booking are **nested resources**

2. In RAML Specifications, define the resources using resource paths as follows :-



```
#%RAML 1.0
title: BookMyHotelAPI
baseUri: http://bookmyhotel.com

/registrations:
  /{registrationId}:
/hotels:
  /{hotelId}:
    /bookings:
/bookings:
  /{bookingId}:
```

   a.
   b. Notice we have defined bookings at two places
   c. /hotels/{hotelId}/bookings :- this represents all the bookings of a specific hotel but /bookings represents all the bookings irrespective of the hotel

**Congratulations, you have completed step 2.**

## Step 3 – Define Methods for Resources

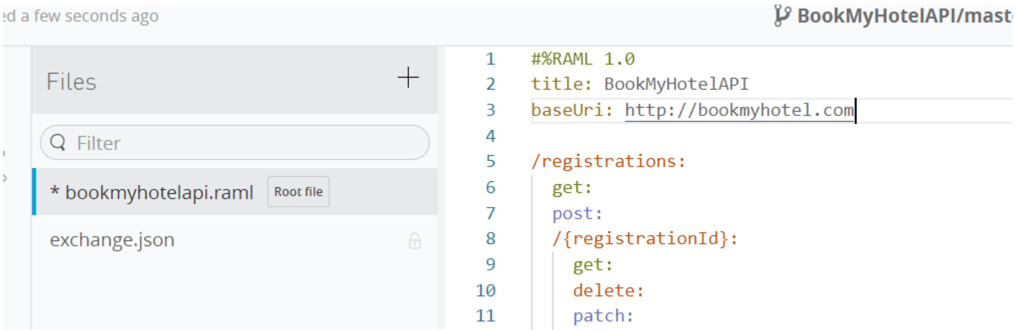
1. Methods for Registrations and Registration Resource (Actions mapped to methods) are as shown below :-

    a.

| Resource | Action | Method | Resource Path |
|---|---|---|---|
| REGISTRATIONS | Get a list of registrations | GET | /registrations |
| REGISTRATIONS | Register a traveller | POST | /registrations |
| REGISTRATION | Get a specific registration | GET | /registrations/{registrationId} |
| REGISTRATION | Delete a specific registration | DELETE | /registrations/{registrationId} |
| REGISTRATION | Update specific registration | PATCH | /registrations/{registrationId} |

2. Define the methods for Registrations and Registration resources in RAML specs as shown below

    a.



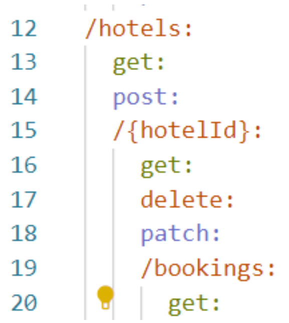
```
#%RAML 1.0
title: BookMyHotelAPI
baseUri: http://bookmyhotel.com

/registrations:
  get:
  post:
  /{registrationId}:
    get:
    delete:
    patch:
```

3. Methods for Hotels and Hotel Resource (Actions mapped to methods) are as shown below :-

    a.

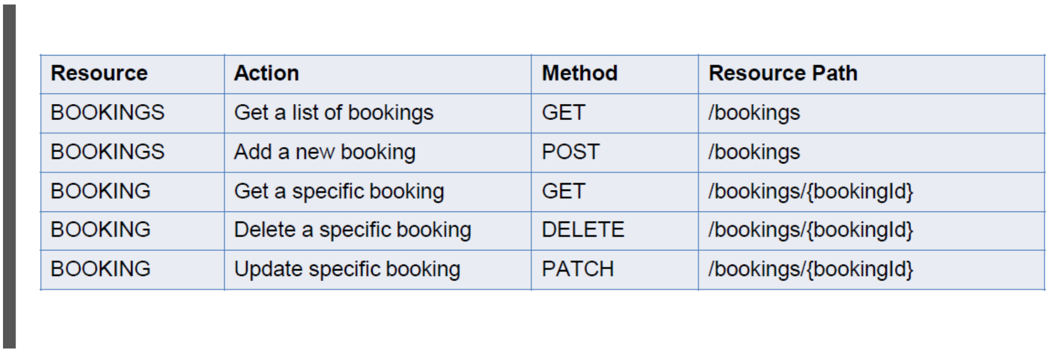
| Resource | Action | Method | Resource Path |
|---|---|---|---|
| HOTELS | Get a list of hotels | GET | /hotels |
| HOTELS | Register a hotel | POST | /hotels |
| HOTEL | Get a specific hotel | GET | /hotels/{hotelId} |
| HOTEL | Delete a specific hotel | DELETE | /hotels/{hotelId} |
| HOTEL | Update specific hotel | PATCH | /hotels/{hotelId} |
| BOOKINGS | Get a list of bookings for a hotel | GET | /hotels/{hotelId}/bookings |

4. Define the methods for Hotels and Hotel resources in RAML specs as shown below

a. 

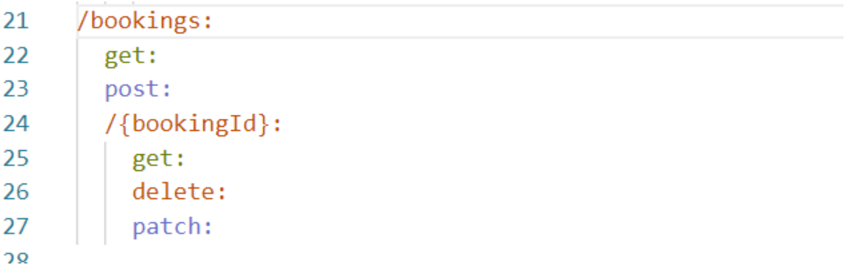
```
/hotels:
  get:
  post:
  /{hotelId}:
    get:
    delete:
    patch:
    /bookings:
      get:
```

5. Methods for Bookings and Booking Resource (Actions mapped to methods) are as shown below :

a. 

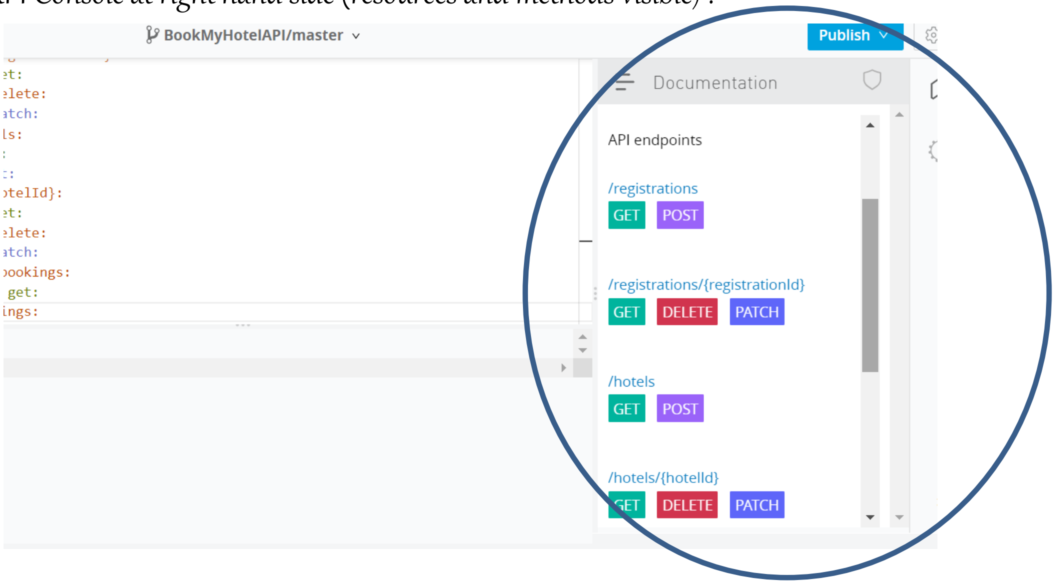
| Resource | Action | Method | Resource Path |
|---|---|---|---|
| BOOKINGS | Get a list of bookings | GET | /bookings |
| BOOKINGS | Add a new booking | POST | /bookings |
| BOOKING | Get a specific booking | GET | /bookings/{bookingId} |
| BOOKING | Delete a specific booking | DELETE | /bookings/{bookingId} |
| BOOKING | Update specific booking | PATCH | /bookings/{bookingId} |

6. Define the methods for Bookings and Booking resources in RAML specs as shown below

a. 

```
/bookings:
  get:
  post:
  /{bookingId}:
    get:
    delete:
    patch:
```

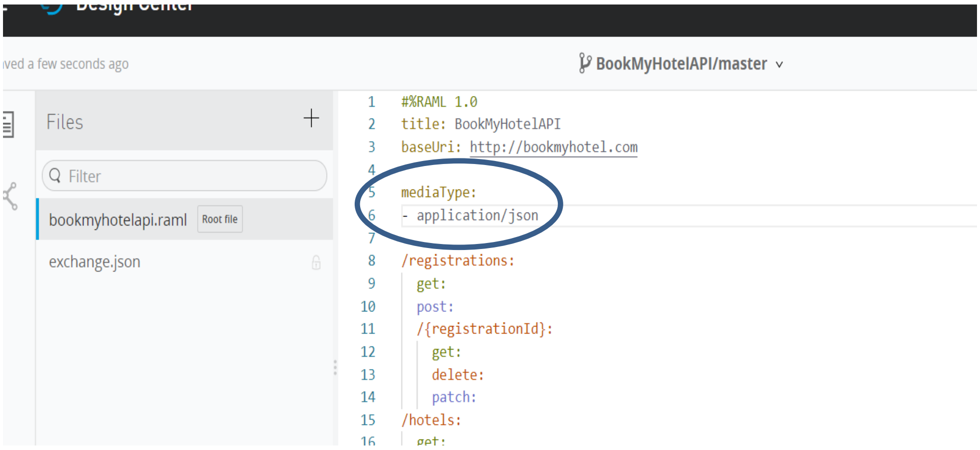
7. Check API Console at right hand side (resources and methods visible) :-

a. 

Congratulations, you have completed step 3.

## Step 4 – Define Media Type

1. Define Default media type as application/json as shown below :-

   a. 

```
#%RAML 1.0
title: BookMyHotelAPI
baseUri: http://bookmyhotel.com

mediaType:
- application/json

/registrations:
  get:
  post:
  /{registrationId}:
    get:
    delete:
    patch:
/hotels:
  get:
```

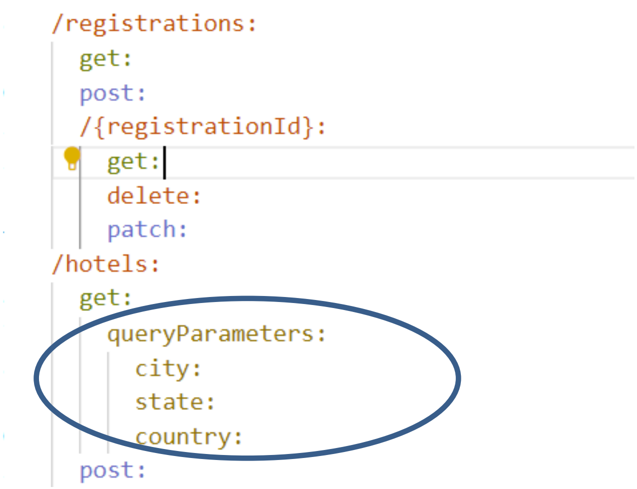
   b. Default media type is to be defined at the **top Section** of RAML specification

2. As we have defined the default media type, it is applicable to all request /response body of all resource/method combination.

**Congratulations, you have completed step 4.**

## Step 5 – Define Query Parameters

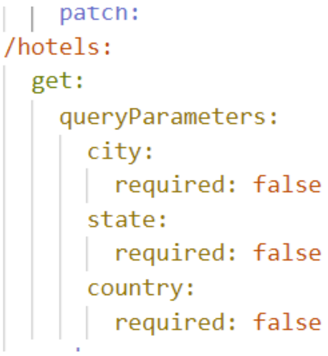
1. For Hotels resource (/hotels), we will define three query parameters – city,state and country assuming that hotels can be searched on the basis of the city,state and country
2. Define the query parameters for Hotels resource as shown below :-



```
/registrations:
  get:
  post:
  /{registrationId}:
    get:
    delete:
    patch:
/hotels:
  get:
    queryParameters:
      city:
      state:
      country:
  post:
```

3. By default all query parameters are mandatory/required but we want to make it optional as per our use case.

4. Define query parameters as optional as shown below -



```
    patch:
/hotels:
  get:
    queryParameters:
      city:
        required: false
      state:
        required: false
      country:
        required: false
```

**Congratulations, you have completed step 5.**

Congratulations!! You have completed this exercise.