Postman

Postman overview

Graphical user interface, text, application, email

Description automatically generated

Also shows status 200

And also time the response took

And size of response body and headers

A screenshot of a computer

Description automatically generated with medium confidence

Graphical user interface, text, application, email

Description automatically generated

This is post data

Resource and collection uris

So this was all about postman

Resource and collection uris

Post man has many more nice features – commonly use features of postman in this video course

<http://www.yourWebSiteAddress.com/api/users/?start=1&limit=50>

/api/users is uri

?start=1&limit=50 is query string

POST /RegisterUserServlet

POST /users 🡪 users is a resource

GET /GetUserDetailsServlet?userId=1

GET /users/1 --- not as query string but as path param

GET /DeleteUserDetailsServlet?userId=1

DELETE /users/1

In rest we do not include the action we want to perform

Post /updateUserDetailsServlet then send data as json payload in body

Put /users/1 just like that 🡪 uri does not contain action

GET /GetAllUsersServlet

Get /users

Get /GetUserDetailsServlet?userId=1

GET /users/1

/GetMessageComments?userId=1&messageId=5

GET /users/1/messages/5/comments

/GetMessageComments?userId=1&messageId=5&commentId=1

/users/1/messages/5/comments/1

The above shows traditional vs rest

We don’t include actions in the uri name for rest

We use plurals in rest

The uri must be predictable for rest

Make uris predictable

Don’t use

/users/1/publishedMessages 🡪 this is not predictable

HTTP Methods

http request will contain information needed for a specific operation to be performed by our web service

crud

non restful

POST – create user

GET – read user details

POST – update user details

GET – delete user details

Restful

Post – create user /users

Get – read user /users/1

Put – update user details /users/1

Delete – delete user details /users1

Can see for restful that uri does not change for get put and delete 🡪 how we know which operation to perform? It is the http method that will tell us what is the intention of the request

Custom actions in rest uri

Graphical user interface, text, application

Description automatically generated

Because our body is in json format

Graphical user interface, text, application, email

Description automatically generated

Introduction to web services app layers

Client 🡪 will send UserModelRest 🡪 which will be picked up by the UsersRestController 🡪 UsersRestController will package the UserModelRest into a UserDto object

UserDto object will be passed to a UsersService 🡪 service layer will take this UserDto object and populate data into a UserEntity object, which the data layer will use to interact with the database

Service layer will do the conversions etc – and other business logic

Data layer – communicate with database

Data layer should not be accepting http requests and should not be sending back http responses

UserEntity are POJO with some annotations

Suggestions

1. Do not skip videos or fast forward them
2. Download his source code and keep it handy
3. What to do if your code does not compile – check error message and try to understand what it is saying
4. Debug your code
5. Stop application, clean and build project , run again
6. Compare code snippet to his code in the source code that he has provided
7. Google the error message – fix it

Now the next step is getting mysql ready

1. See if yours is ok already

Graphical user interface, application

Description automatically generated

Username root

Password NewPassword

Start mysql server and login

Can use terminal

Mysql.server

./mysql.server 🡪 to start the server

Sudo ./mysql.server start

Starting mysql

Once mysql server is started, it means you have a database server running on your server that your application can interact with

Once sql server is running

Can try to login to the sql server (database server)

To log into mysql

Just use ./mysql

Then will need to put username and password to login

This is the mysql password that you need to input – which you provided during mysql installation

Now we need to create a new database for use in our application

Graphical user interface, text, application

Description automatically generated

Now this whole process was cumbersome – it would be easier to use a ui client to interact with the database server – mysql workbench

The pic shown above is mysql workbench ui

In his video he has shown steps to create a user – but I wont be creating a user, I will just be using root for my applications

No need to create user – just work with the root user

Connect to mysql server using mysql workbench – so that you don’t need to use the command line for your work

Download and install mysql workbench

For development purposes

1. Install jdk - google for it – download jdk and hit enter

It will give oracle.com website –

He is using jdk 10

Accept license agreement

Java development kit installation

Main wizard to install java

Simply follow the instructions

How much space will it take on my computer?

Begin installation – type in admin password to your computer

Java -version

1. Install STS

Spring tool suite – develop environment which you can use to debug, download

Go to spring.io -🡪 tools 🡪

STS is IDE – best ide

Ready to use environment to run spring projects