

Index

Symbols

`{{ }}` syntax 54
`{% %}` syntax 54

A

access token 124
Amazon EC2
 reference link 186
APIRouter class
 used, for multiple routing 19-22
authentication methods, FastAPI
 basic HTTP authentication 122
 bearer token authentication 122
 cookies 122

B

beanie library
 using 104
bearer tokens 122
Body() class 31

C

create_engine() method 93
CREATE endpoint
 testing 163-166
CRUD endpoint
 testing 160, 161
CRUD operations
 about 110
 create 110
 delete 112
 methods 105
 read 110, 111
 routes/events.py 112-114
 routes/users.py 114-120
 update 111
CRUD todo app
 building 37-41

D

database
 creating 92-97
 events, creating 97-99
 events, deleting 102-104
 events, reading 99, 100
 events, updating 101, 102

- DELETE endpoint
 - testing 168-171
- dependency injection
 - about 123
 - creating 123, 124
 - using 123, 124
- Depends class 98
- deployment preparation,
 - FastAPI applications
- about 176
- dependencies, managing 176, 177
- environment variables, configuring 177
- Docker
 - about 13
 - deploying with 178
 - FastAPI applications,
 - deploying with 178
 - installation link 14
 - setting up 13
- Dockerfile
 - about 14
 - writing 178, 179
- Docker Hub 14
- Docker images
 - building 180, 181
 - databases, deploying 187
 - deploying 186, 187
- documents 104
- DRY (don't repeat yourself) 58

E

- error handling 48-51
- event document class
 - updating 140-145
- event document routes
 - updating 140-145

- event planner application
 - building 73, 74
- event routes
 - updating 136-140

F

- FastAPI
 - about 21
 - authentication methods 122
 - Jinja templates, using 58-67
 - routing 18
 - routing, example 18, 19
- FastAPI application
 - building 15, 16
 - deploying locally 181-183
 - deploying, with Docker 178
 - event document class and routes,
 - updating 140-145
 - event planner application,
 - building 73, 74
 - event routes, updating 136-140
 - models, implementing 74-77
 - routes, implementing 78
 - running 183-185
 - securing, with JWT 124, 125
 - securing, with OAuth2 124, 125
 - structuring 72, 73
 - updating 133
 - user sign-in route, updating 133-136
- FastAPI Automatic Docs
 - about 31
 - ReDoc 34-36
 - Swagger 32, 33
- FastAPI responses
 - about 44
 - response body 44

- response header 44
- status codes 44, 45

filters

- about 54
- conversion filters 55
- default filter 55
- escape filter 55
- join filter 55
- length filter 55

- filters, in Jinja

- reference link 56

G

Git

- about 4
- branch 8
- download link 4
- installing 4
- operations 5-8

Git documentation

- reference link 8

Google Cloud Run

- reference link 186

H

- HS256 algorithm 131

- HTTP exception 48

HTTPException arguments

- detail 49
- headers 49
- status_code 49

- HTTP request methods 18

HTTP status codes

- reference link 45

I

if statements

- using 56

isolated development environments

- creating, with Virtualenv 9

J

Jinja

- about 54
- filters 54
- if statements, using 56
- loops 56
- macros 57
- template inheritance 58

Jinja's, template inheritance

- reference link 58

Jinja templates

- using, in FastAPI 58-67

JSON Schema 34

JSON Web Token (JWT)

- about 124
- creating 129-132
- FastAPI application, securing
 - with 124, 125
- need for 124
- verifying 129-132

L

- loops 56

M

- macros 57
- main branch 8
- Microsoft Azure deployment
 - reference link 186
- MongoDB
 - database, initializing 106-109
 - documents 104, 106
 - setting up 104
- MongoDB atlas
 - reference link 187
- multiple routing
 - with APIRouter class 19-22

N

- non-existent todo
 - retrieving 51

O

- OAuth2
 - application, securing with 125
 - FastAPI application, securing with 124
- Object Document Mapper (ODM) 104

P

- package management
 - with pip 11, 12
- Path class 30
- path parameters 27-30
- pip
 - about 12
 - basic commands 13
 - installation link 13

- installing 12, 13
 - package management with 11, 12
- primary key 91
- push and pull operation 14
- Pydantic models
 - nested models 26, 27
 - used, for validating request bodies 23-26
- pytest
 - unit testing with 150-153
- pytest fixtures
 - repetition, eliminating with 153, 154

Q

- query parameters 30

R

- READ endpoint
 - testing 161-163
- ReDoc 34-36
- REST API endpoints
 - CREATE endpoint, testing 163-166
 - CRUD endpoint, testing 160, 161
 - DELETE endpoint, testing 168-171
 - READ endpoint, testing 161-163
 - sign-in route, testing 158-160
 - sign-up route, testing 157
 - tests, writing 156
 - UPDATE endpoint, testing 166-168
- request bodies
 - about 30, 31
 - validating, with Pydantic models 23-26
- response header 44
- response models
 - building 45-48

- routes
 - about 18
 - event routes, implementing 83-87
 - implementing 78
 - user routes, implementing 78-82

S

- schemas 22
- Session class
 - methods 92
- sign-in route
 - testing 158-160
- sign-up route
 - testing 157
- SQLModel
 - rows 91, 92
 - Session class 92
 - setting up 90
 - tables 90, 91
- Swagger 32, 33

T

- template inheritance 58
- test coverage report
 - generating 171-174
- test environment
 - setting up 154-156

U

- unit testing
 - with pytest 150-153
- UPDATE endpoint
 - testing 166-168

- user authentication
 - handling 132, 133
- user passwords
 - hashing 125-129
- user sign-in route
 - updating 133-136
- uvicorn tool 18

V

- validation 23
- variable block 54
- Virtualenv
 - used, for creating isolated development environments 9
- virtual environment
 - about 9
 - activating 9, 10
 - creating 9
 - deactivating 10, 11