

OpenAPI in GoLang

- [References](#)

Sample OpenAPI Yaml File

```
openapi: "3.0.0"
info:
  version: 1.0.0
  title: Swagger Petstore
  description: A sample API that uses a petstore as an example to demonstrate features in the OpenAPI 3.0
specification
  termsOfService: http://swagger.io/terms/
  contact:
    name: Swagger API Team
    email: apiteam@swagger.io
    url: http://swagger.io
  license:
    name: Apache 2.0
    url: https://www.apache.org/licenses/LICENSE-2.0.html
servers:
  - url: https://petstore.swagger.io/v2
paths:
  /pets:
    get:
      description: |
        Returns all pets from the system that the user has access to

        Nam sed condimentum est. Maecenas tempor sagittis sapien, nec rhoncus sem sagittis sit amet. Aenean at
        gravida augue, ac iaculis sem. Curabitur odio lorem, ornare eget elementum nec, cursus id lectus. Duis mi
        turpis, pulvinar ac eros ac, tincidunt varius justo. In hac habitasse platea dictumst. Integer at adipiscing
        ante, a sagittis ligula. Aenean pharetra tempor ante molestie imperdiet. Vivamus id aliquam diam. Cras quis
        velit non tortor eleifend sagittis. Praesent at enim pharetra urna volutpat venenatis eget eget mauris. In
        eleifend fermentum facilisis. Praesent enim enim, gravida ac sodales sed, placerat id erat. Suspendisse lacus
        dolor, consectetur non augue vel, vehicula interdum libero. Morbi euismod sagittis libero sed lacinia.

        Sed tempus felis lobortis leo pulvinar rutrum. Nam mattis velit nisl, eu condimentum ligula luctus nec.
        Phasellus semper velit eget aliquet faucibus. In a mattis elit. Phasellus vel urna viverra, condimentum lorem
        id, rhoncus nibh. Ut pellentesque posuere elementum. Sed a varius odio. Morbi rhoncus ligula libero, vel
        eleifend nunc tristique vitae. Fusce et sem dui. Aenean nec scelerisque tortor. Fusce malesuada accumsan magna
        vel tempus. Quisque mollis felis eu dolor tristique, sit amet auctor felis gravida. Sed libero lorem, molestie
        sed nisl in, accumsan tempor nisi. Fusce sollicitudin massa ut lacinia mattis. Sed vel eleifend lorem.
        Pellentesque vitae felis pretium, pulvinar elit eu, euismod sapien.
      operationId: findPets
      parameters:
        - name: tags
          in: query
          description: tags to filter by
          required: false
          style: form
          schema:
            type: array
            items:
              type: string
        - name: limit
          in: query
          description: maximum number of results to return
          required: false
          schema:
            type: integer
            format: int32
      responses:
        '200':
          description: pet response
          content:
            application/json:
              schema:
                type: array
```

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        items:
          $ref: '#/components/schemas/Pet'
      default:
        description: unexpected error
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Error'
  post:
    description: Creates a new pet in the store. Duplicates are allowed
    operationId: addPet
    requestBody:
      description: Pet to add to the store
      required: true
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/NewPet'
    responses:
      '200':
        description: pet response
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Pet'
      default:
        description: unexpected error
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Error'
/pets/{id}:
  get:
    description: Returns a user based on a single ID, if the user does not have access to the pet
    operationId: find pet by id
    parameters:
      - name: id
        in: path
        description: ID of pet to fetch
        required: true
        schema:
          type: integer
          format: int64
    responses:
      '200':
        description: pet response
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Pet'
      default:
        description: unexpected error
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Error'
  delete:
    description: deletes a single pet based on the ID supplied
    operationId: deletePet
    parameters:
      - name: id
        in: path
        description: ID of pet to delete
        required: true
        schema:
          type: integer
          format: int64
    responses:
      '204':
        description: pet deleted
      default:

```

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        description: unexpected error
        content:
          application/json:
            schema:
              $ref: '#/components/schemas/Error'
components:
  schemas:
    Pet:
      allOf:
        - $ref: '#/components/schemas/NewPet'
        - type: object
          required:
            - id
          properties:
            id:
              type: integer
              format: int64

    NewPet:
      type: object
      required:
        - name
      properties:
        name:
          type: string
        tag:
          type: string

    Error:
      type: object
      required:
        - code
        - message
      properties:
        code:
          type: integer
          format: int32
        message:
          type: string

```

References

Reference	URL
Swagger Specifications	https://swagger.io/docs/specification/data-models/dictionaries/
GoLang Code Generation Library	https://github.com/deepmap/oapi-codegen/tree/v1.12.4
Spring Boot + Swagger 3 (OpenAPI 3) Hello World Example	https://www.youtube.com/watch?v=_OCwQwfd6YI
Go Library - getkin/kin-openapi	https://github.com/getkin/kin-openapi
REST Servers in Go: Part 4 - using OpenAPI and Swagger	https://eli.thegreenplace.net/2021/rest-servers-in-go-part-4-using-openapi-and-swagger/