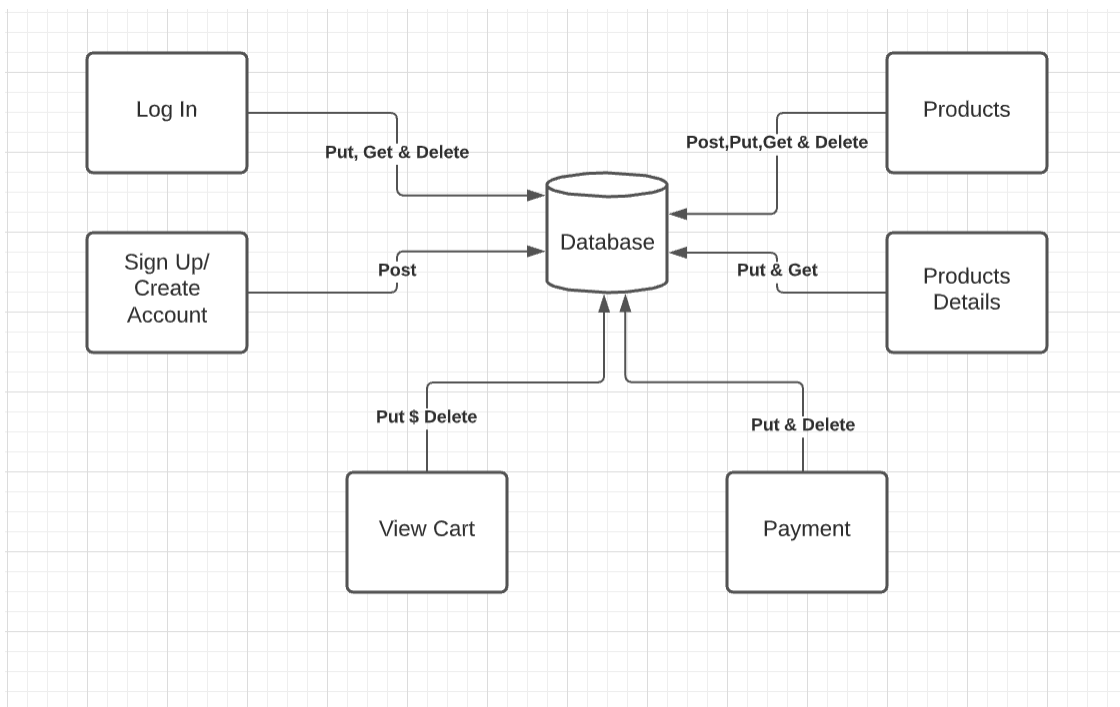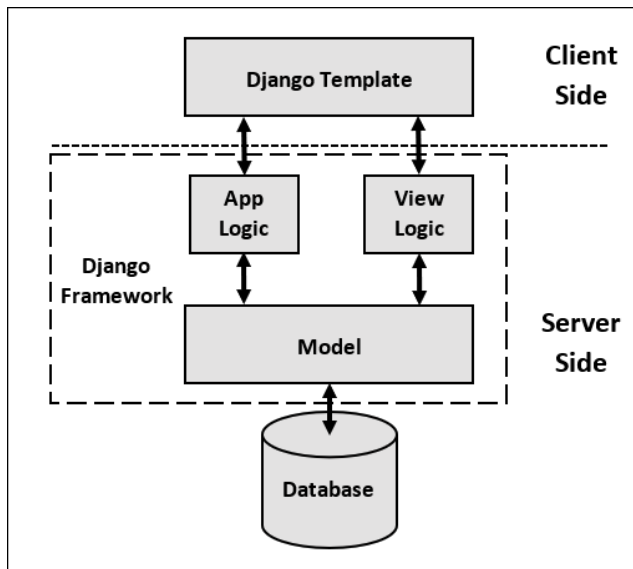# Services Design Document

In my e-commerce website I will use Python and Django framework. Django framework is its automatic admin system, which reads metadata from the Django models, and generates quick, model-centric admin, where administrators of system can view and edit data models.

1. Create Products (Post Method)

POST /products

Implementation Notes
Creates a new product

Parameters

Parameter	Value	Description	Parameter Type	Data Type

product	`type : Women Shoes ,`
	`"price": 49.99,`
	`"shipping": 6.99,`
	`"upc": "Test api",`
	`"description": "Women leather sandals made of multicolor beads rubber sole and leather",`
	
	Parameter content type: application/json
		Product to add	body	Model Example Value

```
{
  "name": "string",
  "type": "string",
  "price": 0,
  "shipping": 0,
  "upc": "string",
  "description": "string",
  "manufacturer": "string",
  "model": "string",
  "url": "string",
  "image": "string"
```

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Empty response		
400	Unexpected error	Model Example Value	

```
{
  "name": "string",
  "message": "string",
  "code": 0,
  "className": "string",
  "errors": {}
}
```

Try it out!   Hide Response

Curl

```
curl -X POST --header 'Content-Type: application/json' --header 'Accept: application/json' -d '{ \
   "name": "African Beaded Sandals", \
   "type": "Women Shoes", \
   "price": 49.99, \
   "shipping": 6.99, \
   "upc": "Test api", \
   "description": "Women leather sandals made of multicolor beads rubber sole and leather", \
   "manufacturer": "Maasaï", \
   "model": "Petite", \
   "url": "https://www.afrikrea.com/en/article/african-women-sandals", \
   "image": "https://d17a17kld06uk8.cloudfront.net/products/3YE8NWM/Z8WHSX1F-large.webp" \
 }' 'http://localhost:3030/products'
```

Request URL

```
http://localhost:3030/products
```

Response Body

```
{
  "id": 9999680,
  "name": "African Beaded Sandals",
  "type": "Women Shoes",
  "price": 49.99,
  "shipping": 6.99,
  "upc": "Test api",
  "description": "Women leather sandals made of multicolor beads rubber sole and leather",
  "manufacturer": "Maasaï",
  "model": "Petite",
  "url": "https://www.afrikrea.com/en/article/african-women-sandals",
  "image": "https://d17a17kld06uk8.cloudfront.net/products/3YE8NWM/Z8WHSX1F-large.webp",
  "updatedAt": "2022-03-18T14:37:54.860Z",
  "createdAt": "2022-03-18T14:37:54.860Z"
}
```

Response Code

```
201
```

Response Headers

```
{
  "access-control-allow-origin": "*",
  "allow": "GET,POST,PUT,PATCH,DELETE",
  "connection": "keep-alive",
  "content-length": "472",
  "content-type": "application/json; charset=utf-8",
  "date": "Fri, 18 Mar 2022 14:37:54 GMT",
  "etag": "W/\"1d8-MjzDcVRYmyeK/cwtM0sUP6QfN0A\"",
  "keep-alive": "timeout=5",
  "vary": "Accept, Accept-Encoding",
  "x-powered-by": "Express"
}
```

2. View Products by ID (Get Method)

GET /products/{id}

Implementation Notes
Returns a product based on an ID,

Response Class (Status 200)
Product response

Model | **Example Value**

```
    "type": "string",
    "price": 0,
    "shipping": 0,
    "upc": "string",
    "description": "string",
    "manufacturer": "string",
    "model": "string",
    "url": "string",
    "image": "string"
}
```

Response Content Type [application/json ✔]

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	9999680	ID of product to fetch	path	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
400	Error		

Model | **Example Value**

```
{
    "name": "string",
    "message": "string",
    "code": 0,
    "className": "string",
    "errors": {}
}
```

[Try it out!] Hide Response

Curl

```
curl -X GET --header 'Accept: application/json' 'http://localhost:3030/products/9999680'
```

Request URL

```
http://localhost:3030/products/9999680
```

Response Body

```json
{
  "id": 9999680,
  "name": "African Beaded Sandals",
  "type": "Women Shoes",
  "price": 49.99,
  "upc": "Test api",
  "shipping": 6.99,
  "description": "Women leather sandals made of multicolor beads rubber sole and leather",
  "manufacturer": "Maasaï",
  "model": "Petite",
  "url": "https://www.afrikrea.com/en/article/african-women-sandals",
  "image": "https://d17a17kld06uk8.cloudfront.net/products/3YE8NWM/Z8WHSX1F-large.webp",
  "createdAt": "2022-03-18T14:37:54.860Z",
  "updatedAt": "2022-03-18T14:37:54.860Z",
  "categories": []
}
```

Response Code

```
200
```

Response Headers

```json
{
  "access-control-allow-origin": "*",
  "allow": "GET,POST,PUT,PATCH,DELETE",
  "connection": "keep-alive",
  "content-length": "488",
  "content-type": "application/json; charset=utf-8",
  "date": "Fri, 18 Mar 2022 14:40:55 GMT",
  "etag": "W/\"1e8-N6QFJWcgT1TxX5Gfgo2PhO9MciU\"",
  "keep-alive": "timeout=5",
  "vary": "Accept, Accept-Encoding",
  "x-powered-by": "Express"
}
```

Get Product by Incorrect ID – <mark>Response code 404</mark>

GET /products/{id}

Implementation Notes
Returns a product based on an ID,

Response Class (Status 200)
Product response

Model | Example Value

```
{
  "name": "string",
  "type": "string",
  "price": 0,
  "shipping": 0,
  "upc": "string",
  "description": "string",
  "manufacturer": "string",
  "model": "string",
  "url": "string",
```

Response Content Type application/json ▾

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	9999681	ID of product to fetch	path	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
400	Error	Model Example Value	

```
{
  "name": "string",
  "message": "string",
  "code": 0,
  "className": "string",
  "errors": {}
}
```

Try it out!   Hide Response

Curl

```
curl -X GET --header 'Accept: application/json' 'http://localhost:3030/products/9999681'
```

```
curl -X GET --header 'Accept: application/json' 'http://localhost:3030/products/9999681'
```

Request URL

```
http://localhost:3030/products/9999681
```

Response Body

```
{
   "name": "NotFound",
   "message": "No record found for id '9999681'",
   "code": 404,
   "className": "not-found",
   "errors": {}
}
```

Response Code

```
404
```

Response Headers

```
{
   "access-control-allow-origin": "*",
   "allow": "GET,POST,PUT,PATCH,DELETE",
   "connection": "keep-alive",
   "content-length": "111",
   "content-type": "application/json; charset=utf-8",
   "date": "Fri, 18 Mar 2022 14:46:34 GMT",
   "etag": "W/\"6f-uEcf2Dm6DtR3t1yVQTZy7LKnSbI\"",
   "keep-alive": "timeout=5",
   "vary": "Accept-Encoding",
   "x-powered-by": "Express"
}
```

3. Delete Product by ID (Delete Method)

DELETE /products/{id}

Implementation Notes
Deletes a single product based on the ID supplied

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	9999680	ID of product to delete	path	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Product deleted		

Delete Product by Incorrect ID – <mark>Response code 404</mark>

DELETE /products/{id}

Implementation Notes
Deletes a single product based on the ID supplied

Parameters

Parameter	Value	Description	Parameter Type	Data Type
id	9999681	ID of product to delete	path	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Product deleted		
400	Unexpected error	Model Example Value	

```
{
  "name": "string",
  "message": "string",
  "code": 0,
  "className": "string",
  "errors": {}
}
```

Try it out!   Hide Response

Curl

```
curl -X DELETE --header 'Accept: application/json' 'http://localhost:3030/products/9999681'
```

Request URL

```
http://localhost:3030/products/9999681
```

Response Body

```
{
  "name": "NotFound",
  "message": "No record found for id '9999681'",
  "code": 404,
  "className": "not-found",
  "errors": {}
}
```

Response Code

```
404
```

Response Code

```
404
```

Response Headers

```
{
  "access-control-allow-origin": "*",
  "allow": "GET,POST,PUT,PATCH,DELETE",
  "connection": "keep-alive",
  "content-length": "111",
  "content-type": "application/json; charset=utf-8",
  "date": "Fri, 18 Mar 2022 14:47:52 GMT",
  "etag": "W/\"6f-uEcf2Dm6DtR3t1yVQTZy7LKnSbI\"",
  "keep-alive": "timeout=5",
  "vary": "Accept-Encoding",
  "x-powered-by": "Express"
}
```

1. **Create** (User Account):

   POST/user

```
curl -X 'POST' \
 -H 'accept: application/json' \
 -H 'Content-Type: application/json' \
 -d '[
 {
  "id": 20210711,
  "username": "johndoe",
  "firstName": "John",
  "lastName": "Doe",
  "streetAddress":"45 Main Street,
  "city":"Salt Lake City",
  "state": "UT",
  "zipCode": "84012",
  "email": "johndoe.gmail.com",
```

```
  "password": "1234",
  "phone": "802-345-8065",
 }
]'
```

Server response

Code   **Details**

200
                  Response body

```
                                                                    Do
{
  "code": 200,
  "type": "unknown",
  "message": "ok"
}
```

1. Update (User Account)- update user firstname and cellphone
PUT/user/{username}

```
curl -X 'PUT' \
 -H 'accept: application/json' \
 -H 'Content-Type: application/json' \
 -d '{
 "id": 1,
 "username": "johnDoe",
 "firstName": "John-Peter",
 "lastName": "Doe",
 "email": "johndoe@gmail.com",
 "password": "12344",
 "phone": "8014537878",
 "userStatus": 1
}'
```

Server response

Code   **Details**

200
Undocumented   **Response body**

```
                                                                    Do
{
```

Code   **Details**

```
"code": 200,
 "type": "unknown",
 "message": "1"
}
```

3. Read (User Account)
GET/ user/{username}

```
curl -X 'GET' \
 'https://petstore.swagger.io/v2/user/johndoe' \
 -H 'accept: application/json'
```

Request URL

```
https://petstore.swagger.io/v2/user/johndoe
```

Server response

Code   **Details**

200
         Response body

```
                                                           Do
{
  "code": 200,
  "type": "unknown",
  "message": "1"
}
```
         Response headers

```
 access-control-allow-headers: Content-Type,api_key,Authorization access-control-allow-
 application/json  date: Mon,08 Nov 2021 02:35:57 GMT  server: Jetty(9.2.9.v20150224)
```

4. Delete (User Account):
DELETE/user/{username}

```
curl -X 'DELETE' \
 'https://petstore.swagger.io/v2/user/johndoe' \
 -H 'accept: application/json'
```

Request URL

`https://petstore.swagger.io/v2/user/johndoe`

Server response

Code   **Details**

200
Undocumented **Response body**

```
                                                              Do
{
  "code": 200,
  "type": "unknown",
  "message": "johndoe"
}
/json  date: Mon,08 Nov 2021 01:35:08 GMT  server: Jetty(9.2.9.v20150224)
```

Place an order for item

Post Method:

POST**/store/order**

```
curl -X 'POST' \
 -H 'accept: application/json' \
 -H 'Content-Type: application/json' \
 -d '{
 "id": 1,
  itemId": 1,
  "quantity": 2,
  "shipDate": "2021-11-08T01:50:21.010Z",
  "status": "placed",
```

```
  "complete": true
}'
```

Server response

Code   **Details**

200
                  Response body

```
                                                          Do
{
  "id": 1,
  "itemId": 1,
  "quantity": 2,
  "shipDate": "2021-11-08T01:50:21.010+0000",
  "status": "placed",
  "complete": true
}
```

Response headers

```
access-control-allow-headers: Content-Type,api_key,Authorization access-control-allow-
application/json  date: Mon,08 Nov 2021 01:50:54 GMT  server: Jetty(9.2.9.v20150224)
```

Delete Method:

DELETE/store/order/{orderId}

```
curl -X 'DELETE' \
  -H 'accept: application/json'
```

Request URL

```
https://petstore.swagger.io/v2/store/order/1
```

Server response

Code   **Details**

200
Undocumented   **Response body**

                                                          Do

Code	Details

```
{
  "code": 200,
  "type": "unknown",
  "message": "1"
}
```

EXAMPLE OF BAD REQUEST
GET METHOD – wrong username

```
curl -X 'GET' \
 'https://petstore.swagger.io/v2/user/john' \
 -H 'accept: application/json'
```

Request URL

```
https://petstore.swagger.io/v2/user/john
```

Server response

Code	Details

404

Error: response status is 404

Response body

Do

```
{
 "code": 1,
 "type": "error",
 "message": "User not found"
}
```

Response headers

```
access-control-allow-headers: Content-Type,api_key,Authorization access-control-allow-
application/json  date: Mon,08 Nov 2021 02:56:30 GMT  server: Jetty(9.2.9.v20150224)
```

Delete Method- wrong username
DELETE/user/{username}

```
curl -X 'DELETE' \
 -H 'accept: application/json'
```

Request URL

Server response

Code   **Details**

200
Undocumented **Response body**

```
                                                        Do
{
  "code": 200,
  "type": "unknown",
  "message": "john"
}
```
            Response headers

```
access-control-allow-headers: Content-Type,api_key,Authorization access-control-allow-
application/json  date: Mon,08 Nov 2021 02:59:09 GMT  server: Jetty(9.2.9.v20150224)
```

Responses

Code   **Description**

400

Invalid username supplied

404

User not found