## 1)

## Endpoint: POST /users/

Used to add a new user to the database.

### Success Response

A screenshot of a computer

Description automatically generated with medium confidence

### 

### Error Response(s)

**i)Condition: The new username OR new email provided already exists.**

**Code: 422 Unprocessable Entity**A screenshot of a computer

Description automatically generated with medium confidence

**ii)Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 2)

## Endpoint: GET /users/

**Request body schema**: N/A

### Success Response

**Code**: 200 OK

**Content**: Array of all the users (subset of users’ data) in the database, who may be admin or customer type:

[  
 {  
 "userid": 1,  
 "username": "Terry Tan",  
 “email”: “[terry@gmail.com](mailto:terry@gmail.com)”,  
 "contact": "91234567",  
 "type": "Customer",  
 "profile\_pic\_url": "https://www.abc.com/terry.jpg",  
 "created\_at": "2021-11-02 17:54:57"  
 },  
 ...  
]

A screenshot of a computer

Description automatically generated with medium confidence

### 

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 3)

## Endpoint: GET /users/:id/

Retrieve a single user by their id.

**Request body schema**: N/A

### Success Response

**Code**: 200 OK

**Content**: Subset of the data of the matching single user:

{  
 "userid": 1,  
 "username": "Terry Tan",  
 “email”: “[terry@gmail.com](mailto:terry@gmail.com)”,  
 "contact": "91234567",  
 "type": "Customer",  
 "profile\_pic\_url": "https://www.abc.com/terry.jpg",  
 "created\_at": "2021-11-02 17:54:57"  
}

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer screen

Description automatically generated

## 4)

## Endpoint: PUT /users/:id/

Update a single user. ID and created timestamp should not be updatable.

**Request body schema**:

Refer to the request body schema for the POST /users endpoint.

### Success Response

**Code**: 204 No Content

**Content**: N/A

A screenshot of a computer screen

Description automatically generated

### 

### Error Response(s)

**i)Condition: The new username OR new email provided already exists.**

**Code: 422 Unprocessable Entity**

A screenshot of a computer screen

Description automatically generated

**ii)Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

5)

## Endpoint: POST /category

Inserts a new category. Category ID should be auto generated.

**Request body schema**:

{  
 “category ": "Laptops",

“description”: “Light and high performance laptops for school”  
   
}

### Success Response

**Code**: 204 No Content

**Content**: N/A

A screenshot of a computer screen

Description automatically generated

### Error Response(s)

**i)Condition: The category name provided already exists.**

**Code: 422 Unprocessable Entity**

A screenshot of a computer

Description automatically generated with medium confidence

**ii)Condition**: Unknow error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 6)

## Endpoint: GET /category

Gets all category.

**Request body schema**:

N/A

### Success Response

**Code**: 200

**Content**:

[{  
 “categoryid": "1",

“category": "Laptops",

“description”: “Light and high performance laptops for school”  
   
},

…

]

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 7\*)

## Endpoint: POST /product/

Used to add a new product to the database.

**Request body schema**:

Ensure that the id and created timestamp are autogenerated and not provided by the user.

{  
 "name": "SP AMD Ryzen 3600 Laptop",  
 "description": "Best Laptop",  
 “categoryid”: 1,  
 “brand”: “SP IT!”  
 "price”:”1855.50”  
}

### Success Response

**Code**: 201 Created

**Content**: ID of the newly created listing:

{  
 "productid": 1  
}

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 8)

## Endpoint: GET /product/:id

Retrieves product info with matching product id.

**Request body schema**: N/A

### Success Response

**Code**: 200 OK

**Content**: Info of the matching product (including category name):

{  
 "name": " SP AMD Ryzen 3600 Laptop",  
 "description": "Best Laptop",  
 “categoryid”: 1,

“categoryname”,“Laptop”,  
 “brand”: “SP IT!”  
 "price”:”1855.50”  
},

A screenshot of a computer

Description automatically generated

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 9)

## Endpoint: DELETE /product/:id/

Deletes a product given its id. **The associated reviews related to the product would also be deleted**. Idempotent.

**Request body schema**: N/A

### Success Response

**Code**: 204 No Content

**Content**: N/A

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 10)

## Endpoint: POST /product/:id/review/

Adds a review for a product listing. A product can have many reviews.

**Request body schema**:

Ensure that the review id and created timestamp are autogenerated and not provided by the user.

{

“userid”:1,  
 “rating”:5  
 "review": “Good Laptop, super fast and can play game in class!”  
  
}

### Success Response

**Code**: 201 Created

**Content**: ID of the newly created listing:

{  
 "reviewid": 1  
}

A screenshot of a computer

Description automatically generated

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 11)

## Endpoint: GET /product/:id/reviews

Retrieves all the reviews of a particular product, including the username of the reviewer (tables join required).

### Success Response

**Code**: 200 OK

**Content**:

[  
 {  
 "productid":1,  
 “userid”:1  
 “username”:”Terry Tan”,  
 “rating”:5  
 "review": “Good Laptop, love gaming in school!”,  
 "created\_at": "2021-11-15 18:54:57"  
 },  
 ...  
]

Text

Description automatically generated

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 12\*)

Endpoint: POST /interest/:userid

User can indicate the category of products they are interested in in their profile preferences. This will be used by the system to provide customized product recommendations to the users.

Note that each user can indicate **multiple categories** they are interested in. Each category can also have **multiple users** interested in it. The userid and categoryid should be stored in a separate table as per Relational database principles (many to many).

(Reference: https://fmhelp.filemaker.com/help/18/fmp/en/index.html#page/FMP\_Help/many-to-many-relationships.html)

**Request body schema**:

One or more category ids separated by “,”

{

categoryids:1,2,4

}

### Success Response

**Code**: 201 Created

**Content**:

Nil

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## Additional Features:

## 13)

## Endpoint: PUT /product/addImage/:pid

Adds an image(JPG or png) file to an existing product listing. Max file size 100KB.

### Success Response

**Code**: 201 Created

**Content**:

Nil

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated

## 14)

## Endpoint: GET /product/showimage/:pid

Show the image of the respective product.

### Success Response

**Code**: 201 Created

**Content**:

Image

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 15)

## Endpoint: GET /promotion/getall

Show all promotions for all products.

### Success Response

**Code**: 200 OK

**Content**:

[

    {

        "promoid": 7,

        "productid": 13,

        "promotion": "Buy 10 Get 4 Free",

        "discountamount": "40% Off for the price of 10 laptops",

        "description": "Save the extra thousand to put toward your dinner this Christmas",

        "promotionperiodstart": "1/12/2021 1st December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "31 Days"

    },

    {

        "promoid": 8,

        "productid": 13,

        "promotion": "Buy 3 Get 1 Free",

        "discountamount": "33% Off for the price of 3 laptops",

        "description": "Get a little something special for your loved ones this Christmas",

        "promotionperiodstart": "26/12/2021 26th December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "5 Days"

    },

    {

        "promoid": 17,

        "productid": 13,

        "promotion": "Buy 3 Get 1 Free",

        "discountamount": "33% Off for the price of 3 laptops",

        "description": "Get a little something special for your loved ones this Christmas",

        "promotionperiodstart": "26/12/2021 26th December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "5 Days"

    }

]

Text

Description automatically generated

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 16)

## Endpoint: GET /promotion/promotionid/:promotionid

Show promotions by promotion id.

### Success Response

**Code**: 200 OK

**Content**:

[

    {

        "productid": 13,

        "promotion": "Buy 3 Get 1 Free",

        "discountamount": "33% Off for the price of 3 laptops",

        "description": "Get a little something special for your loved ones this Christmas",

        "promotionperiodstart": "26/12/2021 26th December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "5 Days"

    }

]

A screenshot of a computer screen

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

## 17)

## Endpoint: GET /promotion/byitem/:pid

Show promotion by item id.

### Success Response

**Code**: 201 Created

**Content**:

[

    {

        "promoid": 7,

        "promotion": "Buy 10 Get 4 Free",

        "discountamount": "40% Off for the price of 10 laptops",

        "description": "Save the extra thousand to put toward your dinner this Christmas",

        "promotionperiodstart": "1/12/2021 1st December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "31 Days"

    },

    {

        "promoid": 8,

        "promotion": "Buy 3 Get 1 Free",

        "discountamount": "33% Off for the price of 3 laptops",

        "description": "Get a little something special for your loved ones this Christmas",

        "promotionperiodstart": "26/12/2021 26th December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "5 Days"

    },

    {

        "promoid": 17,

        "promotion": "Buy 3 Get 1 Free",

        "discountamount": "33% Off for the price of 3 laptops",

        "description": "Get a little something special for your loved ones this Christmas",

        "promotionperiodstart": "26/12/2021 26th December 2021",

        "promotionperiodend": "31/12/2021 31st December 2021",

        "duration": "5 Days"

    }

]

A screenshot of a computer screen

Description automatically generated

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence

## 18)

## Endpoint: POST /promotion/addpromotion

Adds a promotion.

**Request body schema**:

{

    "productid": "13",

    "promotion": "Buy 10 Get 4 Free",

    "discountamount": "40% Off for the price of 10 laptops",

    "description": "Save the extra thousand to put toward your dinner this Christmas",

    "promostart": "1/12/2021 1st December 2021",

    "promoend": "31/12/2021 31st December 2021",

    "duration": "31 Days"

}

### Success Response

**Code**: 201 Created

**Content**:

Promotion Successfully Created!

Promotion ID: 18

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Unknown error

**Code**: 500 Internal Server Error

Text

Description automatically generated

## 20)

## Endpoint: DELETE /promotion/remove/:promotionid

Removes a promotion by its id.

### Success Response

**Code**: 201 Created

**Content**:

Product Successfully Deleted.

A screenshot of a computer

Description automatically generated with medium confidence

### Error Response(s)

**Condition**: Promotion does not exist

**Code**: 404 Not found

A screenshot of a computer screen

Description automatically generated with medium confidence

**Condition**: Unknown error

**Code**: 500 Internal Server Error

A screenshot of a computer

Description automatically generated with medium confidence