BE Services	Request	Responses

Qr Scan	"/scan/{product_id}": {
	"get": {
	"tags": [
	"qrscan"
	],
	"summary": "Scan the meat and give more details",
	"parameters": [
	{
	"name": "product_id",
	"in": "path",
	"description": "Id of the product to be scanned obtained by the scan",
	"required": true,
	"schema": {
	"type": integer
	}
	}],
	}
	},
		"responses": {
		"200": {
		"description": "Successful scan the product",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Product"
		}
		}
		}
		},
		"400": {
		"description": "Invalid product id",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnautohrized"
		}
		},
		"404": {
		"description": "Product not found",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		},

News	"/news": {
	"get": {
	"tags": [
	"news"
	],
	"summary": "Retrieves a list of the news",
		"responses": {
		"200": {
		"description": "List of news was retrieved successfully",
		"content": {
		"application/json": {
		"schema": {

	}
	},
		"$ref": "#/components/schemas/News"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref":
		"#/components/schemas/ErrorUnautohrized"
		}
		},
		"404": {
		"description": "No news found",
		"content": {
		"application/json": {
		"schema": {
		"$ref":
		"#/components/schemas/ErrorNotFound"
		}
		},

	"/news/{news_id}": {
	"get": {
	"tags": [
	"news"
	],
	"summary": "Retrieve a specific new",
	"parameters": [
	{
	"name": "news_id}",
	"in": "path",
	"description": "Id of the new to be retrieved",
	"required": true,
	"schema": {
	"type": integer
	}
	}],
	}
		"responses": {
		"200": {
		"description": "Specified new was retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/New"
		}
		}
		}
		},
		"400": {
		"description": "Invalid news id",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {

		"$ref": "#/components/schemas/ErrorUnautohrized"
		}
		},
		"404": {
		"description": "No news found",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}

Login	"/login": {
	"post": {
	"tags": [
	"authentication"
	],
	"summary": "Add new user",
	"parameters": [
	{
	"name": "body",
	"in": "query",
	"description": "User object to be added",
	"required": true,
	"style": "form",
	"explode": true,
	"schema": {
	"$ref": "#/components/schemas/User"
	}
	}],
	}
	}
		"responses": {
		"200": {
		"description": "Login was successful, token returned",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Login"
		}
		}
		}
		},
		"400": {
		"description": "Invalid request data for login",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "Invalid credentials, user is not authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}

		}
		}
		},
		"403": {
		"description": "Access forbidden, account may be blocked or restricted",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorForbidden"
		}
		}
		}
		},

	"/signup": {
	 "post": {
	  "tags": [
	   "authentication"
	  ],
	  "summary": "Register a new user",
	  "requestBody": {
	   "description": "User object to be added",
	   "required": true,
	   "content": {
	    "application/json": {
	     "schema": {
	      "$ref": "#/components/schemas/User"
	     }
	    }
	   }
	  },
		"responses": {
		   "200": {
		    "description": "User was successfully registered",
		    "content": {
		     "application/json": {
		      "schema": {
		       "$ref": "#/components/schemas/Signup"
		      }
		     }
		    }
		   },
		   "400": {
		    "description": "Invalid user data",
		    "content": {
		     "application/json": {
		      "schema": {
		       "$ref": "#/components/schemas/Error"
		      }
		     }
		    }
		   },
		   "409": {
		    "description": "User already exists",
		    "content": {
		     "application/json": {
		      "schema": {
		       "$ref": "#/components/schemas/ErrorConflict"
		     }
		    }
		   }
		  },
		}

productCategories	"/product-categories": {
	"get": {
	"tags": [
	"Product Categories"
	],
	"summary": "Retrieve product categories based on location",
	"parameters": [
	{
	"name": "location",
	"in": "query",
	"description": "Location to filter product categories",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	}}
		"responses": {
		"200": {
		"description": "Product categories retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ProductCategories"
		}
		}
		}
		},
		"400": {
		"description": "Invalid location parameter",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		"404": {
		"description": "No product categories found for the specified location",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}

		} },

	"/product-categories/{category_id}": {
	"get": {
	"tags": [
	"Product Categories"
	],
	"summary": "Retrieve a product category by ID",
	"parameters": [
	{
	"name": "category_id",
	"in": "path",
	"description": "ID of the product category to retrieve",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	}
		"responses": {
		"200": {
		"description": "Product category retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ProductCategory"
		}
		}
		}
		},
		"400": {
		"description": "Invalid category ID",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		"404": {
		"description": "Product category not found",
		"content": {
		"application/json": {
		"schema": {

		"$ref": "#/components/schemas/ErrorNotFound" } } } }, }

Product	"/product-categories/product/{product_id}": {
	"get": {
	"tags": [
	"Product Categories"
	],
	"summary": "Retrieve product category by product ID",
	"parameters": [
	{
	"name": "product_id",
	"in": "path",
	"description": "ID of the product to retrieve the category for",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	}
		"responses": {
		"200": {
		"description": "Product retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Product"
		}
		}
		}
		},
		"400": {
		"description": "Invalid product ID",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		"404": {
		"description": "Product id not found",

		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}
		}
		},

User	"/user/{userId}": {
	"get": {
	"tags": [
	"User"
	],
	"summary": "Retrieve user by ID",
	"parameters": [
	{
	"name": "userId",
	"in": "path",
	"description": "ID of the user to retrieve",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	}
		"responses": {
		"200": {
		"description": "User retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/User"
		}
		}
		}
		},
		"400": {
		"description": "Invalid user ID",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		"404": {
		"description": "User not found",
		"content": {

		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}
		}
		},

Favorites	"/favorites": {
	"get": {
	"tags": [
	"Favorites"
	],
	"summary": "Retrieve user's favorite items",
	"security": [
	{
	"BearerAuth": []
	}
	],
	}
		"responses": {
		"200": {
		"description": "Favorites retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"type": "array",
		"items": {
		"$ref": "#/components/schemas/Product"
		}
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		}

	"/favorites/{product_id}": {
	"post": {
	"tags": [
	"Favorites"
	],
	"summary": "Add a product to user's favorites",
	"security": [
	{
	"BearerAuth": []
		"responses": {
		"200": {
		"description": "Product added to favorites successfully",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/SuccessMessage"

	}
	],
	"parameters": [
	{
	"name": "product_id",
	"in": "path",
	"description": "ID of the product to add to favorites",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
		}
		}
		}
		},
		"400": {
		"description": "Invalid request data",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"401": {
		"description": "User isn't authenticated",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorUnauthorized"
		}
		}
		}
		},
		"404": {
		"description": "Product not found",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}
		}
		},
		"409": {
		"description": "Product already in favorites",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorConflict"
		}
		}
		}

		}, }

	"/favorites/{product_id}": {
	  "delete": {
	    "tags": [
	      "Favorites"
	    ],
	    "summary": "Remove a product from user's favorites",
	    "security": [
	      {
	        "BearerAuth": []
	      }
	    ],
	    "parameters": [
	      {
	        "name": "product_id",
	        "in": "path",
	        "description": "ID of the product to remove from favorites",
	        "required": true,
	        "schema": {
	          "type": "string"
	        }
	      }
	    ],
	}
		"responses": {
		      "200": {
		        "description": "Product removed from favorites successfully",
		        "content": {
		          "application/json": {
		            "schema": {
		              "$ref": "#/components/schemas/SuccessMessage"
		            }
		          }
		        }
		      },
		      "400": {
		        "description": "Invalid request data",
		        "content": {
		          "application/json": {
		            "schema": {
		              "$ref": "#/components/schemas/Errort"
		            }
		          }
		        }
		      },
		      "401": {
		        "description": "User isn't authenticated",
		        "content": {
		          "application/json": {
		            "schema": {
		              "$ref": "#/components/schemas/ErrorUnauthorized"
		            }
		          }
		        }
		      },
		      "404": {
		        "description": "Product not found in favorites",
		        "content": {
		          "application/json": {
		            "schema": {
		              "$ref": "#/components/schemas/ErrorNotFound"
		            }

		} } }, }

Feedback	"/product-categories/product/{product_id}/feedback": {
	"get": {
	"tags": [
	"Product Feedback"
	],
	"summary": "Retrieve feedback for a specific product",
	"parameters": [
	{
	"name": "product_id",
	"in": "path",
	"description": "ID of the product to retrieve feedback for",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	}
		"responses": {
		"200": {
		"description": "Feedback retrieved successfully",
		"content": {
		"application/json": {
		"schema": {
		"type": "array",
		"items": {
		"$ref": "#/components/schemas/Feedback"
		}
		}
		}
		}
		},
		"400": {
		"description": "Invalid product ID",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Errort"
		}
		}
		}
		},
		"404": {
		"description": "Product not found",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}
		}
		},
		}

	"/product-categories/product/{product_id}/feedback": {
	"post": {
	"tags": [
		"responses": {
		"201": {
		"description": "Feedback added successfully",
		"content": {

	"Product Feedback"
	],
	"summary": "Add feedback for a specific product",
	"parameters": [
	{
	"name": "product_id",
	"in": "path",
	"description": "ID of the product to add feedback for",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],
	"requestBody": {
	"required": true,
	"content": {
	"application/json": {
	"schema": {
	"$ref": "#/components/schemas/Feedback"
	}
	}
	}
	},
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Feedback"
		}
		}
		}
		},
		"400": {
		"description": "Invalid request data",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Errort"
		}
		}
		}
		},
		"404": {
		"description": "Product not found",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/ErrorNotFound"
		}
		}
		}
		},
		}

Comuns a todas as resources		"500": {
		"description": "Internal Server Error",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"
		}
		}
		}
		},
		"503": {
		"description": "Service unavailable",
		"content": {
		"application/json": {
		"schema": {
		"$ref": "#/components/schemas/Error"

		}
		}
		}
		
		"Error": {
		"type": "object",
		"properties": {
		"code": {
		"type": "integer",
		"description": "Error code"
		},
		"message": {
		"type": "string",
		"description": "Error message"
		}
		}
		},

A Secção seguinte é referente a todos os requests.

```
"components": {
  "schemas": {
     "New": {
        "type": "object",
        "required": [
           "titulo",
           "data",
           "descricao"
        ],
        "properties": {
           "titulo": {
            "type": "string",
            "description": "Title of the news article"
          },
          "data": {
            "type": "string",
            "description": "Date of the news article",
            "format": "date-time"
          },
          "descricao": {
            "type": "string",
            "description": "Description of the news article"
          }
        }
      },

"News": {
        "type": "object",
        "properties": {
          "newsList": {
            "type": "array",
            "items": {
              "type": "object",
              "required": [
                "titulo",
                "data",
                "descricao"
              ],
              "properties": {
                "titulo": {
                  "type": "string",
                  "description": "Title of the news article"
                },
                "data": {
                  "type": "string",
                  "description": "Date of the news article",
                  "format": "date-time"
                },
                "descricao": {
                  "type": "string",
                  "description": "Description of the news  article"
                }
              }
            }
          },
"User": {
      "type": "object",
      "properties": {
        "username": {
          "type": "string",
          "description": "Username of the user"
        },
        "password": {
          "type": "string",
          "description": "Password of the user"
        },
        "email": {
          "type": "string",
          "description": "Email address of the user"
        }
      },
      "required": ["username", "password", "email"]
    },
"Signup": {
      "type": "object",
      "properties": {
        "access_token": {
          "type": "string",
          "description": "JWT access token"
    },
    "refresh_token": {
     "type": "string",
     "description": "JWT refresh token"
    }
   }
  },

"Product":
     { "required":
       [ "product ID",
        "produtor",
       "origem",
        " sexo ",
        “idade”,
         “raça”,
         “descricao”
     ],
    "type": "object",
     "properties": {
       "product ID": {
       "type": "integer",
       "description": "Unique identifier for the            product",
       "format": "int64" },
      "produtor":{
       "type": "string",
       "description": "Meat Producer" },
      "origem":  {
       "type": "string",
       "description": "Meat origin" },
       "sexo":{
        "type": "string",
       "description ":    "animal information sex" }
      "idade": {
       "type": "integer",
       "description ":    "animal age",
       "format": "int64"
        }
        “raça”: {
         "type": "string",
         "description ":    "animal race",
        }
       “descricao”: {
         "type": "string",
         "description ":    "gives more details      about the product",
        }
       }

"ProductCategories": {
   "type": "object",
   "properties": {
        "categories": {
          "type": "array",
          "items": {
            "type": "object",
            "properties": {
              "id": {
                "type": "string",
                "description": "Category id"
              },
              "name": {
                "type": "string",
                "description": "Category name"
              },
              "description": {
                "type": "string",
                "description": "Category description"
              },
              "image": {
                "type": "binary",
                "description": "Category image"
              }
            }
          }
        }
      },
"ProductCategory": {
      "type": "object",
      "properties": {
        "id": {
          "type": "string",
          "description": "Category ID"
        },
        "name": {
          "type": "string",
          "description": "Category name"
        },
        "description": {
          "type": "string",
          "description": "Category description"
        },
            "image": {
                "type": "binary",
                "description": "Category image"
              }
      }
    },
"SuccessMessage": {
      "type": "object",
      "properties": {
        "message": {
          "type": "string",
          "description": "Success message"
        }
      }
    },
    "Login": {
      "type": "object",
      "properties": {
        "access_token": {
          "type": "string",
          "description": "JWT access token"
        },
        "refresh_token": {
          "type": "string",
          "description": "JWT refresh token"
        }
      }
    },

  "Feedback": {
      "type": "object",
      "properties": {
        "rating": {
          "type": "integer",
          "description": "Rating given by the user (1-5)"
        },
        "comment": {
          "type": "string",
          "description": "Comment provided by the user"
        },
        "userId": {
          "type": "string",
          "description": "ID of the user who provided the feedback"
        }
      }
    }

   "ErrorNotFound": {
      "type": "object",
      "properties": {
        "code": {
          "type": "integer",
          "description": "Error code"
        },
        "message": {
          "type": "string",
          "description": "Not found error message"
        }
      }
    },

    "Error": {
      "type": "object",
      "properties": {
        "code": {
          "type": "integer",
          "description": "Error code"
        },
        "message": {
          "type": "string",
          "description": "Error message"
        }
      }
    },
    "ErrorUnauthorized": {
      "type": "object",
      "properties": {
        "code": {
          "type": "integer",
          "description": "Error code"
        },
        "message": {
          "type": "string",
          "description": "Unauthorized access message"
        }
      }
    },
    "ErrorForbidden": {
      "type": "object",
      "properties": {
        "code": {
          "type": "integer",
          "description": "Error code"
        },
        "message": {
          "type": "string",
          "description": "Forbidden access message"
        }
      }
    },
}
```