

BE Service Requests	Resources			
qrscan	GET /scan/{product_id}			
news	GET /news			
	GET /news/{news_id}			
login	POST /signup			
	POST /login			
productCategories	GET /product-categories?location={location}			
	GET /product-categories/{category_id}			
product	GET /product-categories/product/{product_id}			
	GET /product-categories/product/{product_id}/details			
user	GET /user/{user_id}			
	PUT /user/{user_id}/picture			
favorites	GET /favorites			
	POST /favorites/{product_id}			
	DELETE /favorites/{product_id}			
feedback	GET /product-categories/product/{product_id}/feedback			
	POST /product-categories/product/{product_id}/feedback			
statistics	GET /statistics/positive			
	GET /statistics/negative			

BE Services	Operations	Endpoints	Input data	Output data
qrscan	GET	/scan/{product_id}	product_id	Product
news	GET	/news		News
	GET	/news/{news_id}	news_id	News
login	POST	/signup	email,password,username	auth_token
	POST	/login	email,password	auth_token
productCategories	GET	/product-categories/		ProductCategories
	GET	/product-categories/{category_id}	category_id	ProductCategory
product	GET	/product-categories/product/{product_id}	product_id	Product
	GET	/product-categories/product/{product_id}/details	product_id	Product
user	GET	/user/{user_id}	user_id	User
	PUT	/user/{user_id}/picture	user_id	
favorites	GET	/favorites		ProductList
	POST	/favorites/{product_id}	product_id	
	DELETE	/favorites/{product_id}	product_id	
feedback	GET	/product-categories/product/{product_id}/feedback	product_id	FeedBack
	POST	/product-categories/product/{product_id}/feedback	product_id	
statistics	GET	/statistics/positive		Statistics
	GET	/statistics/negative		Statistics

```

"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"
    }
  }
}

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"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"
    }
  }
}

```

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

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"AuthToken": {
  "type": "object",
  "properties": {
    "access token": {
      "type": "string",
      "description": "JWT access token"
    },
    "refresh token": {
      "type": "string",
      "description": "JWT refresh token"
    }
  }
}

```

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"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"
          }
        }
      }
    }
  }
}

```

```

"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"
    }
  }
}

```

BE orchestration
 Workflow1 1->2->3->4
 Workflow2 1->2->3
 Workflow3 1->2
 Workflow4 1->2->3