

# Bazar (Market) Price Tracker API Documentation

API Base URL:

`http://127.0.0.1:8000/api/`

Authentication

JWT Authentication is required.

1. Login and Get Token:

URL: `/api/token/`

Method: POST

Request Body:

```
{  
  "username": "your_username",  
  "password": "your_password"  
}
```

Response:

```
{  
  "refresh": "your_refresh_token",  
  "access": "your_access_token"  
}
```

2. Refresh Token:

URL: `/api/token/refresh/`

Method: POST

Request Body:

```
{  
  "refresh": "your_refresh_token"  
}
```

Response:

```
{  
  "access": "new_access_token"  
}
```

## Market API

### 1. Get All Markets

URL: /api/markets/

Method: GET

Response:

```
[  
  {  
    "id": 1,  
    "name": "Kawran Bazar",  
    "location": "Dhaka",  
    "opening_hours": "9 AM - 9 PM"  
  }  
]
```

### 2. Get Single Market

URL: /api/markets/{id}/

Method: GET

Response:

```
{  
  "id": 1,  
  "name": "Kawran Bazar",  
  "location": "Dhaka",  
  "opening_hours": "9 AM - 9 PM"  
}
```

### 3. Create New Market

URL: /api/markets/

Method: POST

Request Body:

```
{  
  "name": "New Market",  
  "location": "Sylhet",  
  "opening_hours": "10 AM - 8 PM"  
}
```

Response:

```
{  
  "id": 2,  
  "name": "New Market",  
  "location": "Sylhet",  
  "opening_hours": "10 AM - 8 PM"  
}
```

#### 4. Update Market

URL: /api/markets/{id}/

Method: PUT

Request Body:

```
{  
  "name": "Updated Market",  
  "location": "Chittagong",  
  "opening_hours": "8 AM - 6 PM"  
}
```

Response:

```
{  
  "id": 1,  
  "name": "Updated Market",  
  "location": "Chittagong",  
  "opening_hours": "8 AM - 6 PM"  
}
```

#### 5. Delete Market

URL: /api/markets/{id}/

Method: DELETE

Response: 204 No Content

#### Item API

##### 1. Get All Items

URL: /api/items/

Method: GET

Response:

```
[  
  {  
    "id": 1,  
    "name": "Potato"  
  },  
  {  
    "id": 2,  
    "name": "Tomato"  
  }  
]
```

## 2. Create New Item

URL: /api/items/

Method: POST

Request Body:

```
{  
  "name": "Onion"  
}
```

Response:

```
{  
  "id": 3,  
  "name": "Onion"  
}
```

## Price API

### 1. Get All Prices

URL: /api/prices/

Method: GET

Response:

```
[  
  {  
    "id": 1,  
    "market": {  
      "id": 1,  
      "name": "Kawran Bazar"  
    },  
    "item": {  
      "id": 1,  
      "name": "Potato"  
    },  
    "price_per_kg": "30.00",  
    "last_updated": "2024-09-15"  
  }  
]
```

### 2. Create New Price

URL: /api/prices/

Method: POST

Request Body:

```
{  
  "market": 1,  
  "item": 2,  
  "price_per_kg": "40.00"  
}
```

Response:

```
{  
  "id": 2,  
  "market": {  
    "id": 1,  
    "name": "Kawran Bazar"  
  },  
  "item": {  
    "id": 2,  
    "name": "Tomato"  
  },  
  "price_per_kg": "40.00",  
  "last_updated": "2024-09-15"  
}
```

### 3. Update Price

URL: /api/prices/{id}/

Method: PUT

Request Body:

```
{  
  "market": 1,
```

```
"item": 2,  
"price_per_kg": "45.00"  
}
```

Response:

```
{  
  "id": 1,  
  "market": {  
    "id": 1,  
    "name": "Kawran Bazar"  
  },  
  "item": {  
    "id": 2,  
    "name": "Tomato"  
  },  
  "price_per_kg": "45.00",  
  "last_updated": "2024-09-15"  
}
```

## Price Comparison API

### 1. Compare Prices of an Item in Multiple Markets

URL: /api/compare/

Method: GET

Query Parameters:

- item: Item name
- markets: List of market IDs (comma-separated)



Example URL: /api/compare/?item=potato&markets=1,2

Response:

```
{
  "prices": [
    {
      "market": {
        "id": 1,
        "name": "Kawran Bazar"
      },
      "item": {
        "id": 1,
        "name": "Potato"
      },
      "price_per_kg": "30.00",
      "last_updated": "2024-09-15"
    },
    {
      "market": {
        "id": 2,
        "name": "New Market"
      },
      "item": {
        "id": 1,
        "name": "Potato"
      },
      "price_per_kg": "28.00",
```

```
    "last_updated": "2024-09-15"
  }
]
}
```

## Price History API

### 1. Get Price History of an Item

URL: /api/prices/{item\_id}/history/

Method: GET

Response:

```
{
  "history": [
    {
      "market": {
        "id": 1,
        "name": "Kawran Bazar"
      },
      "item": {
        "id": 1,
        "name": "Potato"
      },
      "price_per_kg": "30.00",
      "last_updated": "2024-09-15"
    },
    {
```

```
"market": {  
  "id": 1,  
  "name": "Kawran Bazar"  
},  
"item": {  
  "id": 1,  
  "name": "Potato"  
},  
"price_per_kg": "35.00",  
"last_updated": "2024-09-14"  
}  
]  
}
```

## Errors and Responses

### 1. 404 Not Found:

Occurs if a resource (market, item, price) is not found.

Response:

```
{  
  "detail": "Not found."  
}
```

### 2. 401 Unauthorized:

Occurs if JWT token is missing or invalid.

Response:

```
{  
  "detail": "Authentication credentials were not provided."  
}
```