

# Todo API Endpoints Documentation

## Authentication Endpoints

### Register User

- **URL:** `/api/register/`
- **Method:** `POST`
- **Auth Required:** No
- **Permissions:** None
- **Request Body:**

json

```
{
  "username": "example_user",
  "email": "user@example.com",
  "password": "securepassword123",
  "first_name": "John",
  "last_name": "Doe"
}
```

- **Success Response:**
  - Code: 201 CREATED
  - Content:

json

```
{
  "user": {
    "id": 1,
    "username": "example_user",
    "email": "user@example.com",
    "first_name": "John",
    "last_name": "Doe"
  },
  "refresh": "refresh_token_here",
  "access": "access_token_here"
}
```

### Login User

- **URL:** `/api/login/`
- **Method:** `POST`
- **Auth Required:** No
- **Permissions:** None
- **Request Body:**

json

```
{  
  "username": "example_user",  
  "password": "securepassword123"  
}
```

- **Success Response:**

- Code: 200 OK
- Content:

json

```
{  
  "user": {  
    "id": 1,  
    "username": "example_user",  
    "email": "user@example.com",  
    "first_name": "John",  
    "last_name": "Doe"  
  },  
  "refresh": "refresh_token_here",  
  "access": "access_token_here"  
}
```

## Refresh Token

- **URL:** `/api/token/refresh/`
- **Method:** `POST`
- **Auth Required:** No
- **Request Body:**

json

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

- **Success Response:**

- Code: 200 OK
- Content:

json

```
{  
  "access": "new_access_token_here"  
}
```

## Todo Endpoints

### List and Create Todos

- **URL:** `/api/todos/`
- **Methods:** `GET`, `POST`
- **Auth Required:** Yes (JWT)
- **Permissions:** Authenticated users

### GET - List all todos

- **Headers:**
  - Authorization: Bearer {access\_token}
- **Success Response:**
  - Code: 200 OK
  - Content:

json

```
[
  {
    "id": 1,
    "title": "Complete project",
    "description": "Finish the Django REST API project",
    "status": "pending",
    "owner": "example_user",
    "created_at": "2025-05-17T12:00:00Z",
    "updated_at": "2025-05-17T12:00:00Z",
    "due_date": "2025-05-20"
  },
  ...
]
```

## POST - Create new todo

- **Headers:**

- Authorization: Bearer {access\_token}

- **Request Body:**

json

```
{
  "title": "Learn Django REST",
  "description": "Complete the tutorial on DRF",
  "status": "in_progress",
  "due_date": "2025-05-25"
}
```

- **Success Response:**

- Code: 201 CREATED
- Content:

json

```
{
  "id": 2,
  "title": "Learn Django REST",
  "description": "Complete the tutorial on DRF",
  "status": "in_progress",
  "owner": "example_user",
  "created_at": "2025-05-17T13:00:00Z",
  "updated_at": "2025-05-17T13:00:00Z",
  "due_date": "2025-05-25"
}
```

## Retrieve, Update, Delete Todo

- **URL:** `/api/todos/{id}/`
- **Methods:** `GET`, `PUT`, `PATCH`, `DELETE`
- **Auth Required:** Yes (JWT)
- **Permissions:** Owner only

### GET - Retrieve a todo

- **Headers:**
  - Authorization: Bearer {access\_token}
- **Success Response:**
  - Code: 200 OK
  - Content:

json

```
{
  "id": 1,
  "title": "Complete project",
  "description": "Finish the Django REST API project",
  "status": "pending",
  "owner": "example_user",
  "created_at": "2025-05-17T12:00:00Z",
  "updated_at": "2025-05-17T12:00:00Z",
  "due_date": "2025-05-20"
}
```

## PUT/PATCH - Update a todo

- **Headers:**

- Authorization: Bearer {access\_token}

- **Request Body** (PUT - Full update):

json

```
{  
  "title": "Complete project",  
  "description": "Finish the Django REST API project with tests",  
  "status": "completed",  
  "due_date": "2025-05-20"  
}
```

- **Request Body** (PATCH - Partial update):

json

```
{  
  "status": "completed"  
}
```

- **Success Response:**

- Code: 200 OK
- Content: Updated todo object

## DELETE - Delete a todo

- **Headers:**

- Authorization: Bearer {access\_token}

- **Success Response:**

- Code: 204 NO CONTENT