

## UST Task Manager

**Project:** Task Tracker API(Phase 1)

**Tech Stack:** FastAPI + Python

**Security:** JWT authentication (HS256)

**Data Storage:** In-Memory Lists Only (No DB)

**Goal:** Build a secure backend API that manages tasks.

### Step1: login

#### Scenario 1: Successful Login

##### Input

```
{
  "username": "rahul",
  "password": "password123"
}
```

##### Output

```
{
  "access_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",
  "token_type": "bearer"
}
```

**POST** /login Login

##### Parameters

No parameters

##### Request body required

[Edit Value](#) | Schema

```
{
  "username": "rahul",
  "password": "password123"
}
```

Code	Details
200	<p>Response body</p> <pre>{   "access_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...eyJzdWIiOiJyYWh1bCIiTiV4cC16NTc2NDk0OTg0MjQ...n-02amXEFToWii28tOllhaa42gg0UlBGiFBIZx...IHOJuB",   "token_type": "bearer" }</pre> <p><a href="#">Copy</a> <a href="#">Download</a></p>

## ✖ Scenario 2: Login Failure

### Input

```
{  
  "username": "rahul",  
  "password": "wrongpass"  
}
```

### Output

```
{"detail": "Invalid username or password"}
```

**POST /login** Login

**Parameters**

No parameters

**Request body** required

[Edit Value](#) | [Schema](#)

```
{  
  "username": "rahul",  
  "password": "wrongpass"  
}
```

**401** Error: Unauthorized  
Undocumented

**Response body**

```
{  
  "detail": "Incorrect username or password"  
}
```

## ✓ Scenario 3: Create Task

### Input

```
{  
  "title": "Book train tickets",  
  "description": "Book IRCTC tickets to Chennai"  
}
```

### Output

```
{  
  "id": 1,  
  "title": "Book train tickets",  
  "description": "Book IRCTC tickets to Chennai",  
  "completed": false  
}
```

sager

POST /tasks Create

#### Parameters

No parameters

#### Request body required

Edit Value | Schema

```
{  
  "title": "Book train tickets",  
  "description": "Book IRCTC tickets to Chennai"  
}
```

200

#### Response body

```
{  
  "id": 2,  
  "title": "Book train tickets",  
  "description": "Book IRCTC tickets to Chennai",  
  "completed": false  
}
```

## ✖ Scenario 4: Create Task with Missing Title

### Input

```
{  
  "description": "Something"  
}
```

### Output

```
{  
  "detail": [  
    {  
      "loc": ["body", "title"],  
      "msg": "field required",  
      "type": "value_error.missing"  
    }  
  ]  
}
```

POST /tasks Create

#### Parameters

No parameters

#### Request body required

Edit Value | Schema

```
{  
  "description": "Something"  
}
```

Media type

application/json

Example Value | Schema

```
{  
  "detail": [  
    {  
      "loc": [  
        "string",  
        0  
      ],  
      "msg": "string",  
      "type": "string"  
    }  
  ]  
}
```

## ✓ Scenario 5: Update Task

### Input

```
{  
  "title": "Pay Water Bill",  
  "description": "Pay BWSSB bill",  
  "completed": false  
}
```

anager

```
  "completed": true  
}
```

### Output

```
{  
  "id": 1,  
  "title": "Pay Water Bill",  
  "description": "Pay BWSSB bill",  
  "completed": true  
}
```

### Parameters

Name	Description
task_id <small>* required</small>	integer (path)

2

### Request body required

Edit Value | Schema

```
{  
  "title": "Pay Water Bill",  
  "description": "Pay BWSSB bill",  
  "completed": true  
}
```

200

### Response body

```
{  
  "id": 2,  
  "title": "Pay Water Bill",  
  "description": "Pay BWSSB bill",  
  "completed": true  
}
```

### Response headers

## ✖ Scenario 6: Get Non-Existing Task

### Response

```
{"detail": "Task not found"}
```

GET

/tasks/{task\_id} Search Byid

### Parameters

Name	Description
------	-------------

task_id * required	
--------------------	--

integer	
---------	--

(path)	
--------	--

3	
---	--

Code	Details
------	---------

404	Error: Not Found
-----	------------------

*Undocumented*

#### Response body

```
{  
    "detail": "Task Not Found"  
}
```

## ✖ Scenario 7: Delete Non-Existing Task

### Response

```
{"detail": "Task not found"}
```

**DELETE** /tasks/{task\_id} Delete

#### Parameters

Name	Description
------	-------------

task_id * required	integer (path)
--------------------	-------------------

404

*Undocumented*

Error: Not Found

#### Response body

```
{  
    "detail": "Task Not Found"  
}
```

## Scenario 8:Display all tasks

GET /**tasks** Display

**Parameters**

No parameters

**Execute**

---

200 Response body

```
[  
  {  
    "id": 2,  
    "title": "Pay Water Bill",  
    "description": "Pay BWSSB bill",  
    "completed": true  
  }  
]
```

Response headers