

# Task Manager - Next.js Frontend Code Explained

```
'use client';
```

This marks the file as a Client Component in Next.js App Router. It allows the use of React hooks like `useState` and `useEffect`.

```
import { useEffect, useMemo, useState } from 'react';
```

Imports React hooks: `useState` for state variables, `useEffect` for lifecycle effects, and `useMemo` for memoized values.

```
type Status = 'pending' | 'in-progress' | 'completed';
```

Defines a TypeScript type for allowed task statuses.

```
type Task = { _id: string; title: string; description?: string; status: Status; createdAt: string; updatedAt: string; }
```

Defines the Task object structure with optional description and required fields.

```
const API = process.env.NEXT_PUBLIC_API_BASE || 'http://localhost:4000';
```

Defines the backend API base URL. It first checks environment variables, otherwise defaults to `localhost:4000`.