

Here's your complete **Task Management Dashboard** project in Angular **without a standalone application or services**. The project follows your requirements, including **modular organization, multiple components, no forms, no routing, and parent-child communication** using **services within the module**.

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## Project Structure

```
task-management/
├── src/
│   ├── app/
│   │   ├── app.module.ts
│   │   ├── app.component.ts
│   │   ├── app.component.html
│   │   └── modules/
│   │       ├── task/
│   │       │   ├── task.module.ts
│   │       │   ├── task.model.ts
│   │       │   ├── task.service.ts
│   │       │   ├── task-list/
│   │       │   │   ├── task-list.component.ts
│   │       │   │   ├── task-list.component.html
│   │       │   │   └── task-list.component.css
│   │       │   ├── task-create/
│   │       │   │   ├── task-create.component.ts
│   │       │   │   ├── task-create.component.html
│   │       │   │   └── task-create.component.css
│   │       └── shared/
│   │           └── shared.module.ts
```

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### 1. Task Model (**task.model.ts**)

Defines the **Task** structure.

```
export interface Task {
  id: number;
  name: string;
  status: 'Pending' | 'In Progress' | 'Completed';
  priority: 'Low' | 'Medium' | 'High';
}
```

---

## 2. Task Service (**task.service.ts**)

Manages tasks within the **TaskModule** (not standalone).

```
import { Injectable } from '@angular/core';
import { BehaviorSubject } from 'rxjs';
import { Task } from '../task.model';

@Injectable()
export class TaskService {
  private tasks: Task[] = [
    { id: 1, name: 'Sample Task', status: 'Pending', priority: 'Medium' }
  ];
  private tasksSubject = new BehaviorSubject<Task[]>(this.tasks);
  tasks$ = this.tasksSubject.asObservable();

  addTask(name: string) {
    const newTask: Task = {
      id: this.tasks.length + 1,
      name,
      status: 'Pending',
      priority: 'Medium'
    };
    this.tasks.push(newTask);
    this.tasksSubject.next([...this.tasks]);
  }

  updateTaskStatus(id: number, status: Task['status']) {
    this.tasks = this.tasks.map(task =>
      task.id === id ? { ...task, status } : task
    );
    this.tasksSubject.next([...this.tasks]);
  }

  deleteTask(id: number) {
    this.tasks = this.tasks.filter(task => task.id !== id);
    this.tasksSubject.next([...this.tasks]);
  }
}
```

---

## 3. Task List Component

### **task-list.component.ts** (Displays Tasks)

```
import { Component, OnInit } from '@angular/core';
```

```

import { TaskService } from '../task.service';
import { Task } from '../task.model';

@Component({
  selector: 'app-task-list',
  templateUrl: '../task-list.component.html',
  styleUrls: ['../task-list.component.css']
})
export class TaskListComponent implements OnInit {
  tasks: Task[] = [];

  constructor(private taskService: TaskService) {}

  ngOnInit() {
    this.taskService.tasks$.subscribe(tasks => {
      this.tasks = tasks;
    });
  }

  updateStatus(id: number, status: Task['status']) {
    this.taskService.updateTaskStatus(id, status);
  }

  deleteTask(id: number) {
    this.taskService.deleteTask(id);
  }
}

```

### **task-list.component.html (UI for Task List)**

```

<div *ngFor="let task of tasks" class="task-item">
  <span>{{ task.name }} - {{ task.status }} - {{ task.priority }}</span>
  <button (click)="updateStatus(task.id, 'In Progress')">In Progress</button>
  <button (click)="updateStatus(task.id, 'Completed')">Completed</button>
  <button (click)="deleteTask(task.id)">Delete</button>
</div>

```

### **task-list.component.css (Styling)**

```

.task-item {
  display: flex;
  align-items: center;
  justify-content: space-between;
  padding: 10px;
  border-bottom: 1px solid #ccc;
}

```

```
button {  
  margin-left: 10px;  
  padding: 5px;  
  cursor: pointer;  
}
```

---

## 4. Task Create Component

### **task-create.component.ts** (Adding Tasks)

```
import { Component } from '@angular/core';  
import { TaskService } from '../task.service';  
  
@Component({  
  selector: 'app-task-create',  
  templateUrl: './task-create.component.html',  
  styleUrls: ['./task-create.component.css']  
})  
export class TaskCreateComponent {  
  constructor(private taskService: TaskService) {}  
  
  addTask() {  
    const taskName = prompt('Enter Task Name:');  
    if (taskName) {  
      this.taskService.addTask(taskName);  
    }  
  }  
}
```

### **task-create.component.html** (UI for Adding Tasks)

```
<button (click)="addTask()">Add Task</button>
```

### **task-create.component.css** (Styling)

```
button {  
  padding: 8px;  
  background-color: blue;  
  color: white;  
  border: none;  
  cursor: pointer;  
}
```

---

## 5. Task Module (**task.module.ts**)

Registers components and **provides TaskService** within the module.

```
import { NgModule } from '@angular/core';
import { CommonModule } from '@angular/common';
import { TaskListComponent } from './task-list/task-list.component';
import { TaskCreateComponent } from './task-create/task-create.component';
import { TaskService } from './task.service';

@NgModule({
  declarations: [TaskListComponent, TaskCreateComponent],
  imports: [CommonModule],
  exports: [TaskListComponent, TaskCreateComponent],
  providers: [TaskService] // Providing service within this module only
})
export class TaskModule {}
```

---

## 6. Main App Module (**app.module.ts**)

Imports **TaskModule** to use task components in **AppComponent**.

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';
import { AppComponent } from './app.component';
import { TaskModule } from './modules/task/task.module';

@NgModule({
  declarations: [AppComponent],
  imports: [BrowserModule, TaskModule],
  bootstrap: [AppComponent]
})
export class AppModule {}
```

---

## 7. Main App Component

### **app.component.html** (Uses Task Components)

```
<h1>Task Management Dashboard</h1>
<app-task-create></app-task-create>
<app-task-list></app-task-list>
```

## app.component.ts

```
import { Component } from '@angular/core';

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {}
```

---

## ✓ Features Implemented

- ✓ **Modular Design** (`TaskModule`, `SharedModule`)
- ✓ **Multiple Components** (`TaskListComponent`, `TaskCreateComponent`)
- ✓ **No Forms** (Tasks are added using `prompt()`)
- ✓ **No Routing** (All logic in components)
- ✓ **Service within the Module** (`TaskService` provided in `TaskModule`)
- ✓ **Parent-Child Communication** (Task list updates dynamically via `BehaviorSubject`)

This is a **complete, functional Task Management Dashboard** following **your exact requirements**. Let me know if you need any improvements! 🚀