

ToDo List Application Documentation

The ToDo List Application is a full-stack web-based task management system that allows users to:

- Create, view, update, and delete tasks (CRUD operations)
- Manage task attributes such as status, priority, due date, assignee, and comments
- Perform real-time task tracking (incoming, ongoing, outgoing)
- View tasks in a user-friendly and responsive UI

❖ Tech Stack

Layer	Technology Used
Frontend	Angular
Backend	Spring Boot, Hibernate, Java
Database	MySQL

❖ Frontend (Angular)

Components

1. TaskListComponent

- Displays list of tasks with Edit/Delete options
- Supports pagination, filtering (search), and sorting

2. TaskFormComponent

- Form to create or edit tasks
- Includes validation for required fields

Services

- **TaskService**
Handles communication with the backend via HTTP requests.

Models

- **Task Model (task.model.ts)**
Defines the structure of a Task object.

❖ Backend (Spring Boot)

Entity

- **Task.java**
Java class annotated with `@Entity`, mapped to the task table.

Repository

- **TaskRepository.java**
Interface extending `JpaRepository<Task, Long>`.

Service

- **TaskService.java**
Contains business logic for CRUD operations.

Controller

- TaskController.java
Exposes RESTful endpoints under **/api**.

Method	Endpoint	Description
GET	/api/tasks	Get all tasks
POST	/api/task	Create a new task
PUT	/api/task/{id}	Update a task by ID
DELETE	/api/task/{id}	Delete a task by ID

Application View :

Tasks

RefreshNew Task

Total Records: 31 Show per page:

5

Assigned To	Status	Due Date	Priority	Comments	Actions
User2	In Progress	Sep 2, 2023	Normal	Task 2 comment	<button>Edit</button> <button>Delete</button>
User3	Not Started	Sep 3, 2023	Low	Task 3 comment	<button>Edit</button> <button>Delete</button>
User4	Completed	Sep 4, 2023	High	Task 4 comment	<button>Edit</button> <button>Delete</button>
User5	In Progress	Sep 5, 2023	Normal	Task 5 comment	<button>Edit</button> <button>Delete</button>
User6	Not Started	Sep 6, 2023	Low	Task 6 comment	<button>Edit</button> <button>Delete</button>

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Tasks

shubham

Refresh

New Task

Total Records: 1 Show per page: 5

Assigned To	Status	Due Date	Priority	Comments	Actions
Shubhamm	In Progress	Jun 18, 2025	High	Hello	<div>EditDelete</div>

Tasks

Search...

Refresh

New Task

Total Records: 31 Show per page: 10

Assigned To	Status	Due Date	Priority	Comments	Actions
User2	In Progress	Sep 2, 2023	Normal	Task 2 comment	<div>EditDelete</div>
User3	Not Started	Sep 3, 2023	Low	Task 3 comment	<div>EditDelete</div>
User4	Completed	Sep 4, 2023	High	Task 4 comment	<div>EditDelete</div>
User5	In Progress	Sep 5, 2023	Normal	Task 5 comment	<div>EditDelete</div>
User6	Not Started	Sep 6, 2023	Low	Task 6 comment	<div>EditDelete</div>
User7	Completed	Sep 7, 2023	High	Task 7 comment	<div>EditDelete</div>
User8	In Progress	Sep 8, 2023	Normal	Task 8 comment	<div>EditDelete</div>
User9	Not Started	Sep 9, 2023	Low	Task 9 comment	<div>EditDelete</div>
User10	Completed	Sep 10, 2023	High	Task 10 comment	<div>EditDelete</div>
User11	In Progress	Sep 11, 2023	Normal	Task 11 comment	<div>EditDelete</div>

Tasks

Total Records: 31 Show per page

Assigned To	Status
User2	In Progress
User3	Not Started
User4	Completed
User5	In Progress
User6	Not Started

New Task

Assigned To

Status

Not Started

Due Date

dd-mm-yyyy

Priority

Normal

Comments

Cancel

Save

Refresh

New Task

Actions

Edit

Delete

Edit

Delete

Edit

Delete

Edit

Delete

Edit

Delete