# Final Year Project Proposal: Jira-like Project Management Tool

## 🔍 Overview

This project involves building a Jira-like project management tool using Spring Boot and Angular. It demonstrates full-stack development skills, real-world software engineering concepts such as issue tracking, workflows, and team collaboration.

## 🧩 Key Modules

### 1. Authentication & Authorization

* • JWT-based login/logout
* • Role-based access (Admin, Manager, Developer, Tester)

### 2. Project Management

* • Create/manage projects
* • Assign members to a project
* • Project roles (owner, contributor)

### 3. Issue Tracking

* • Create issues: Task, Bug, Story, Epic
* • Priorities: Low, Medium, High, Critical
* • Statuses: To Do → In Progress → Done (custom workflows optional)
* • Assignees, due dates, attachments

### 4. Kanban Board

* • Drag-and-drop board by status
* • Filters by assignee, priority, due date

### 5. Sprint Management (optional)

* • Backlog
* • Sprint creation & planning
* • Story points, burn-down chart

### 6. Comments & Collaboration

* • Add comments to tasks
* • Mentions (@username)
* • File attachments

### 7. Dashboard

* • Personal dashboard (your tasks, activity)
* • Project dashboard (team velocity, status summary)

### 8. Notifications (optional)

* • Real-time or email notifications on updates/assignments

## 🛠️ Tech Stack

This project will be developed using the following technologies:

|  |  |
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| Layer | Technology |
| Frontend | Angular + Tailwind / Material UI |
| Backend | Spring Boot + Spring Security + Spring Data JPA |
| Auth | JWT |
| Database | PostgreSQL / MySQL |
| Realtime (optional) | WebSockets (for live updates) |
| Deployment | Docker + Railway / Heroku / Render |

## 📦 Advanced Ideas (Optional)

* • Workflow customization (define your own statuses)
* • Audit logs
* • Markdown support in comments/descriptions
* • REST API documentation with Swagger
* • CI/CD integration (mock Bitbucket/GitHub commits)
* • Mobile-responsive PWA version

## ✅ Why It’s a Great Choice

* • Complex but manageable if scoped correctly
* • Highly relevant to team-based software development
* • Impressive for interviews (especially for companies that use tools like Jira, Trello, Asana)
* • Lets you showcase architecture, design patterns, REST API, and frontend dynamics