

Task Management Workflow

CSE 111 Project

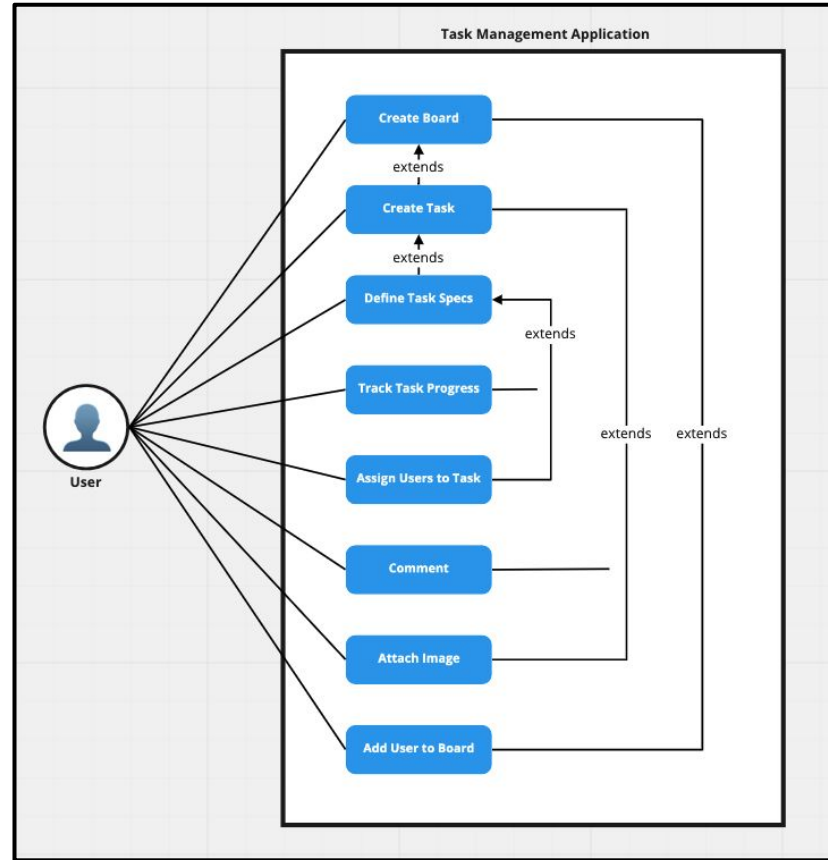
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System Description

Our project is a **task management application**, similar to Trello and Asana.

Users can...

- create boards for various projects and pin tasks in each board
- add other users to the board
- define specifications for each task
- track progress of a task
- assign users to a task
- comment and attach images to a task



Use Case Diagram

E/R Diagram

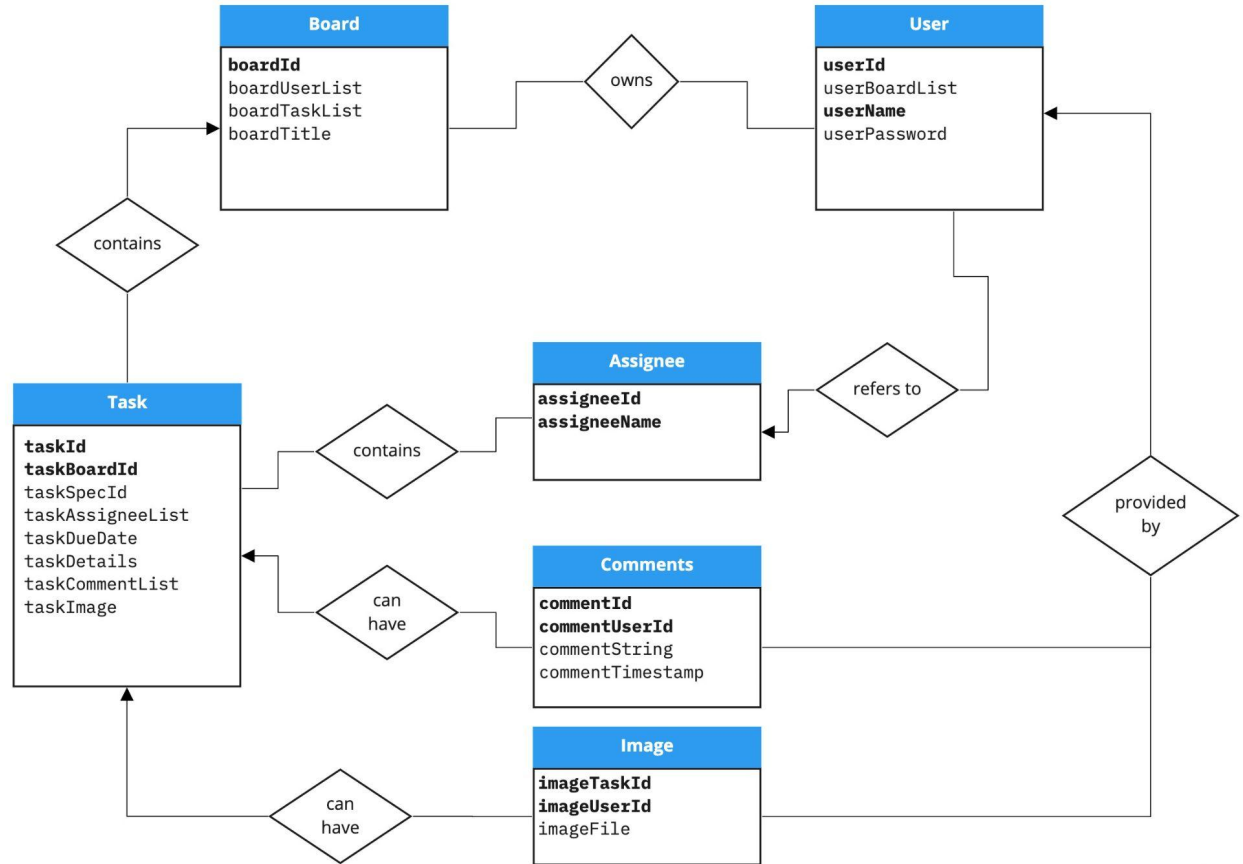
- 6 Entities

- Board
- User
- Task
- Assignee
- Comment
- Image

- 2 Many-Many

- Board-User
- Task-Assignee

[Link to Board](#)



Relational Schema

```
CREATE TABLE User (  
    UserId INTEGER primary key,  
    Username varchar not null,  
    Password varchar not null  
);  
  
CREATE TABLE BoardUsers (  
    BoardId INTEGER NOT NULL,  
    UserId INTEGER NOT NULL  
);  
  
CREATE TABLE Board (  
    BoardId INTEGER primary key,  
    Title string NOT NULL  
);  
  
CREATE TABLE Task (  
    TaskId INTEGER PRIMARY KEY,  
    BoardId INTEGER NOT NULL,  
    Title string,  
    DueDate varchar,  
    Details string,  
    Image varbinary,  
    Status char(15) DEFAULT 'TO DO'  
);
```

```
CREATE TABLE TaskAssignee (  
    TaskId INTEGER NOT NULL,  
    AssigneeId INTEGER NOT NULL  
);  
  
CREATE TABLE Assignee (  
    UserId INTEGER NOT NULL,  
    Username varchar NOT NULL  
);  
  
CREATE TABLE Comment (  
    TaskId INTEGER NOT NULL,  
    UserId INTEGER NOT NULL,  
    CommentId INTEGER PRIMARY KEY NOT NULL,  
    Message string NOT NULL,  
    Timestamp varchar NOT NULL  
);  
  
CREATE TABLE Image (  
    TaskId INTEGER NOT NULL,  
    UserId INTEGER NOT NULL,  
    File varbinary NOT NULL  
);
```

Implementation Details

- Frontend: HTML, CSS, Javascript
- Backend: Node.js
 - Express.js
- Database: SQLite

Github Repository

[Link to Repository](#)