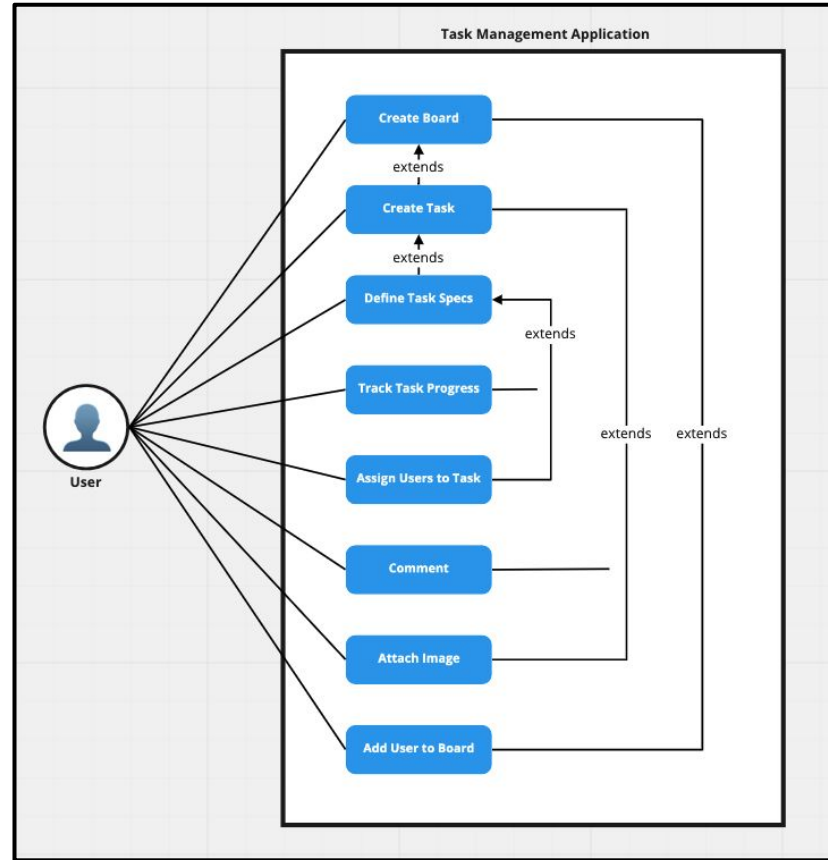# Task Management Workflow

CSE 111 Project Phase 1

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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
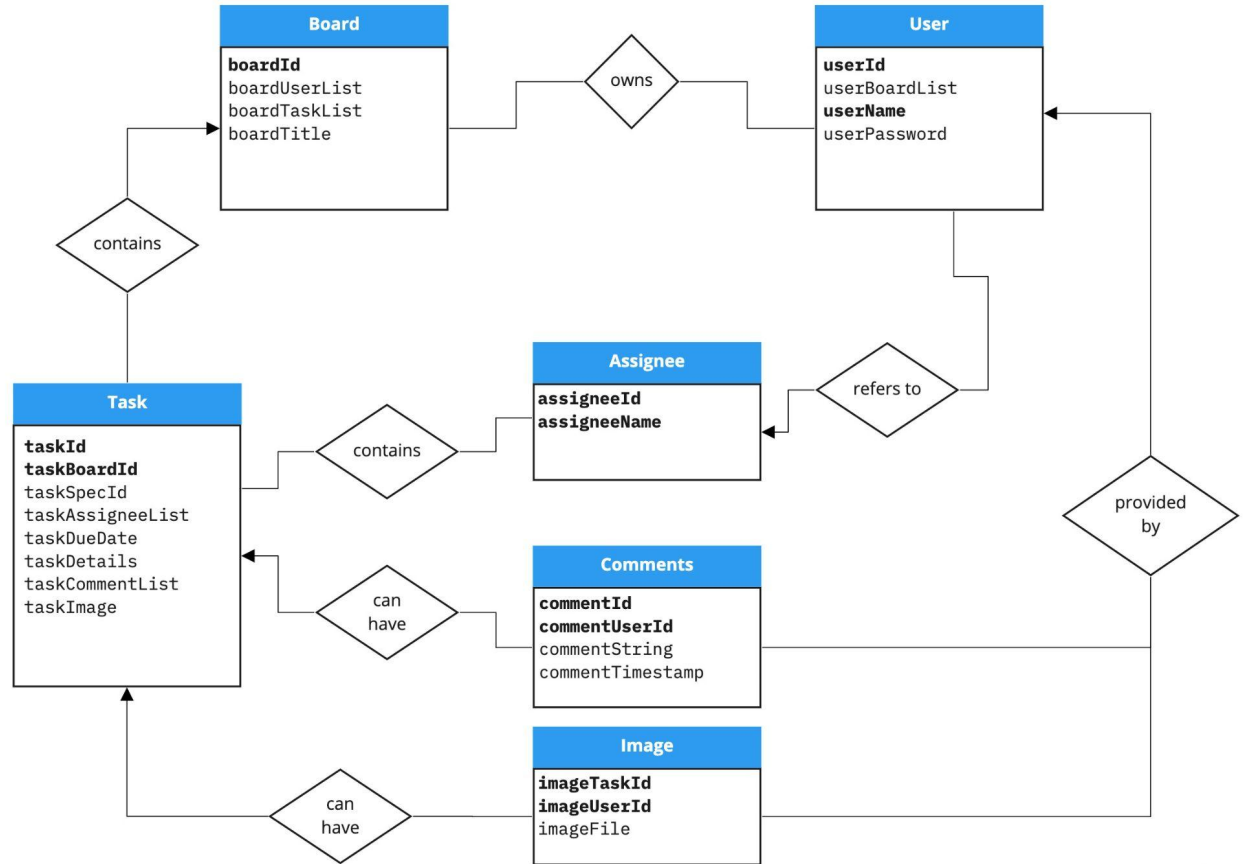- comment and attach images to a task

Use Case Diagram

E/R Diagram

- 6 Entities
  - Board
  - User
  - Task
  - Assignee
  - Comment
  - Image

- 2 Many-Many
  - Board-User
  - Task-Assignee

Link to Board

Board

boardId
boardUserList
boardTaskList
boardTitle

owns

User

userId
userBoardList
userName
userPassword

contains

refers to

Assignee

assigneeId
assigneeName

Task

taskId
taskBoardId
taskSpecId
taskAssigneeList
taskDueDate
taskDetails
taskCommentList
taskImage

contains

can have

provided by

Comments

commentId
commentUserId
commentString
commentTimestamp

can have

Image

imageTaskId
imageUserId
imageFile

miro

Relational Schema

```sql
CREATE TABLE user {
  u_UserId, --PRIMARY KEY
  u_BoardList,
  u_Username,
  u_Password
};

CREATE TABLE board {
  b_BoardId, --PRIMARY KEY
  b_UserList,
  b_TaskList,
  b_Title,
};

CREATE TABLE task {
  t_TaskId, --PRIMARY KEY
  t_BoardId,
  t_SpecId,
  t_AssigneeList,
  t_DueDate,
  t_Details,
  t_CommentList,
  t_Image
};
```

```sql
CREATE TABLE assignee {
  a_UserId, --PRIMARY KEY
  a_Username
};

CREATE TABLE comment {
  c_CommentId, -- PRIMARY KEY
  c_UserId,
  c_String,
  c_Timestamp
};

CREATE TABLE image {
  i_TaskId -- PRIMARY KEY
  i_UserId
  i_File
};
```

Relational Schema

User
- u_UserId, u_BoardList, u_Username, u_Password

Owns (User-Board**)**
- Id

Board
- b_BoardId, b_UserList, b_TaskList, b_Title

Task
- t_TaskId, t_BoardId, t_SpecId, t_AssigneeList, t_DueDate, t_Details, t_CommentList, t_Image

Contains (Task-Assignee)
- Id

Assignee
- a_UserId, a_Username

Comment
- c_CommentId, c_UserId, c_String, c_Timestamp

Image
- i_TaskId, i_UserId, i_File

Github Repository

[Link to Repository](#)