Presentation Layer	

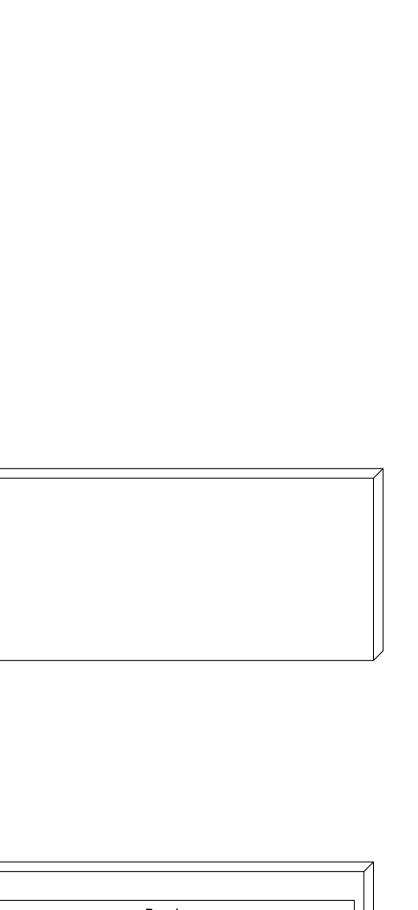
# Service Layer

### User

- + changePassword(username: string , oldP: string, newP: string): json
- + createUser(username: string, password: string): json
- + login(username: string, password: string): json

+ cr + ad

+ ne



### Board

eateBoard(Name: string, userEmail: string)

dTask(title: String, Description: String, DueDate: String): json

xtState(email: string, boardName: string, State: int, TaskID: int): json

Task

+ createTask(Title: string, Description: string, DueDate: string): json

+ EditTitle(newTitle: string, user: User, board: string): json

+ logout(userEmail: string):json

+ EditDueDate(newDate: string, user: User, board: string): json

+ EditDescription(newBody: string, user: User, board: string): json

## **Business Layer**

### UserController

- users: Dictionary<int, User>
- loggedIn: Collection
- + CreateUser(password: string, email: String): void
- + DeleteUser(email: string): void
- + UserExists(email: string): boolean
- + GetUser(email: string): User
- + validatePassword(user: User, password: String): boolean
- + login(email: String, password: String): void
- + logout(user: User): void

### User

+ USERNAME: string

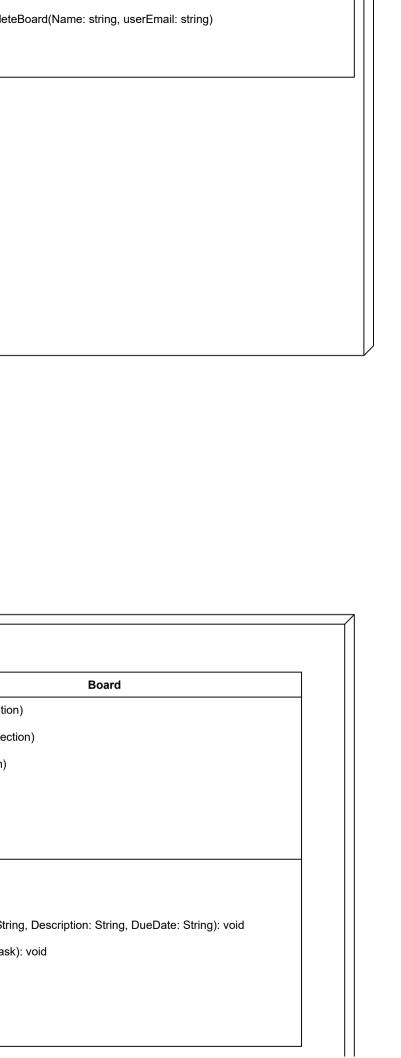
- Backlog(Collec

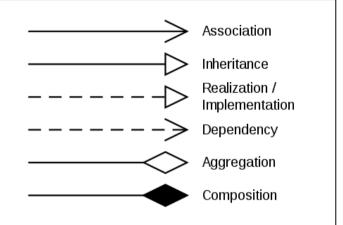
- InProgress(Coll

- Done(Collection

+ Name(String)

- + addTask(title: S
- + changeState(Ta
- + getters
- + setters





Aggregation: child can exist without the parent

Composition: child cannot exist without the parent

# From Wikipedia

https://en.wikipedia.org/wiki/Class\_diagram

# **Visibility**

- + public
- private
- # protected

- password: string
- Boards: Collection
- TasksInProgress: Collection
+ ChangePassword(oldP: string, newP: string): void
+ Login(password: string): boolean
+ getters
+ setters
Г
Task
- Title(String)
- DueDate(String)
+ CREATION DATE(DateTime)
- Description(newBody: string): void
- State(int)
- TaskID(int)
+ EditTitle(newTitle: string): void
+ EditDueDate(newDate: String): void
+ EditDescription(newBody: string): void
1

+ Setters

Board: DictionamaxTasks: Int =

+ Exists(Name: S + createBoard(N

+ deleteBoard(Name

+ changeMax(ne

# BoardController ry<User, Board> -1 String): Boolean ame: String): void ame: String): void e: String): void wMax: Int): void