

# Business layer:

## Board:

- Added a new field called "boardId" for using it in the database in progress
- Added a method called "getCol" to get a column from the board as explained in the requirements
- Added a method called "getcolname" to get a column name from the board for our comfort
- Added a getter for the field "useremail"
- Added a getter for the field "boardname"
- Added a method called "getlimit" to get a column's limit for extra accessibility
- Added a method called "limitcol" to set a column's limit for extra accessibility
- Added a method called "limitAll" to set a specific limit for all the columns in the board
- Added a method called "InProgressTasks" to check what tasks are currently in progress as explained in the requirements
- Removed all the methods that were previously in this class because they are irrelevant for this class

## Column:

- Added a new field called "name" to use for columns names as explained in the requirements
- Removed the method "remove" since its unnecessary and not mentioned in the requirements
- Added a getter for the field "name"
- Added a getter for the field "taskslimit"
- Added a setter for the field "taskslimit"
- Added method for presenting all the tasks in the column as explained in the requirements (it was required only for in progress but we decided to implement it to every column just in case)

## BoardController:

- Added a new field called "userStatus" to keep track if a user is online or offline
- Added a new field called "boardId" for the database just like in Board class
- Added a new field for making logs
- Added a new field called "currTaskId" for using it in the database in progress
- Added a method called "AddBoard" for adding a board to a specific user as explained in the requirements
- Added a method called "RemoveBoard" for removing a board from a specific user as explained in the requirements

- Added a method called "LimitColumn" for setting a limit of tasks in a column in the board as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "GetColumnLimit" for getting the limit of tasks in a column in the board (It is in this class since we removed the task controller)
- Added a method called "InProgressTasks" for presenting all the tasks that are in progress (It is in this class since we removed the task controller)
- Added a method called "GetColumnName" for getting the name of a specific column in the board
- Added a method called "GetColumn" to access a specific column in the board (It is in this class since we removed the task controller)
- Added a method called "AddTask" for adding a new task to the board (It is in this class since we removed the task controller)
- Added a method called "MoveTask" for moving a specific task in the board (It is in this class since we removed the task controller)
- Added a method called "UpdateTaskTitle" for updating a specific task's title in the board as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "UpdateTaskDescription" for updating a specific task's title in the board as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "UpdateTaskDueDate" for updating a specific task's deadline in the board as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "checktitle" to check if a task title is valid as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "checkdesc" to check if a task description is valid as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "checkdate" to check if a task date has expired as explained in the requirements (It is in this class since we removed the task controller)
- Added a method called "ValidateEmail" to check if an email is valid as explained in the requirements
- Added a method called "checkStatus" to check if a user is online to validate relevance of some methods in this class

### **Task:**

- First of all we removed the task controller class since it is unnecessary (the Task class is a part of Board class so we moved the needed methods to BoardController class)
- Added a new field called "dueDate" for tracking a task deadline
- Added a new field called "taskId" for using it in the database in progress

- Moved all the previous methods to BoardController class
- Added a getter for the field "taskId"
- Added a setter for the field "Title"
- Added a setter for the field "Description"
- Added a setter for the field "dueDate"
- Added a getter for the field "ColumnOrdinal"
- Added a getter for the field "Title"
- Added a getter for the field "Description"
- Added a getter for the field "creationTime"
- Added a getter for the field "dueDate"

### **User:**

- Added a new field called "userId" for using it in the database in progress
- Added a new field called "status" to keep track if a user is logged in or not
- Added a new field for making logs
- Added a getter for the field "status"
- Removed all the methods except for "getEmail" some of them were moved to the user controller and some of them to the board controller
- Added a method called "login" to log the user in
- Added a method called "logout" to log the user out
- Added a getter for the field "password"
- Added a getter for the field "userId"

### **UserController:**

- Added a new field called "users" to keep track of the users in the system and their emails
- Added a new field called "userId" for using it in the database in progress
- Added a new field for making logs
- Added a method called "Register" to add a new user to the system as explained in the requirements
- Added a method called "Login" to log a user in the system as explained in the requirements
- Added a method called "Logout" to log a user out from the system as explained in the requirements
- Added a method called "ValidateEmail" to check if an email is valid or not as explained in the requirements
- Added a method called "checkPass" to check if a password is valid as explained in the requirements

## Service Layer:

### BoardService:

- First of all we removed the TaskService class just like TaskController as mentioned previously because we found it unnecessary since Task is a part of the Board and we moved its methods to BoardService class
- We added a new package called "toReturn" for our accessibility during the coding process (to use some fields that are private in a json serializer since json needs a public field)
- Added a method called "toJson" this converts a regular string to a json string so we can use it to return values or error messages
- Added a method called "LimitColumn" for setting a limit of tasks to a specific column in the board
- Added a method called "GetColumnLimit" for getting the limit of tasks for a specific column in the board
- Added a method called "GetColumnName" for getting the name of a column from the board
- Added a method called "GetColumn" for presenting all the task in a specific column in the board

### UserService:

- Added the method "toJson" this converts a regular string to a json string so we can use it to return values or error messages