

## **Changes 2:**

### **Changes in Service Layer :**

#### **Board Service :**

- 1.Added the new functions : ( LeaveBoard , JoinBoard , TransferOwnership , GetBoardName , Loaddata , DeleteData ).
- 2.Added : boardConverterSL and columnConverterSL because we don't want to expose BoardBL and ColumnBL directly to the upper layers.
3. updated variable with "var" types to their respective function return type in GetUserBoards and GetAllColumns.

#### **Task Service :**

- 1.Added the new functions : ( AssignTask , LoadData , DeleteData )
2. Added : taskConverterSL because we don't want to expose taskBL directly to the upper layers.
3. removed comments about exceptions.

#### **User Service :**

- 1.Added the new functions : ( LoadData and DeleteData ).
  - 2.updated PerformAuthOperation to void
  3. simplified HandleAuth
  - 4.removed the redundant "success" check from HandleAuth now that PerformAuthOperation doesn't return string
- \*We Added LoadData because it Loads saved data from the database into memory when the program starts and DeleteData Clears data from the database.
- 

### **Changes in Business Layer :**

#### **Board Facade:**

- 1.we changed the file boards and we add to the dictionary board id because required to have a an id for the board and this is an easy way to find the board id.
- 2.Added a new file board id .

3. we added new files BoardController \_boardController , ColumnController \_columnController , TaskController \_taskController so we can use the functions from its classes.

4. implement the functions LoadData and DeleteData .

5. changed return type of CreateBoard, LimitColumn, RemoveTask, UpdateTask, MoveTaskForwards:

from string to void, there is no need to return "success

6.change return type of DeleteBoard to ((string, int), BoardBL) .

7. corrected the LimitColumn's newTaskLimit to include 0 as a positive limit.

8. We add AddBoard to add a board to a specific user boards.

9.simplified the check of board name string in handleBoardName using string.IsNullOrEmpty.

10. turned repeated input check into functions.

11.incorpareted logging into each exception throw.

#### **BoardBL:**

1. simplified the logic in FindTaskColumn to fix potential test fails

2.fixed logic error in MoveTaskForwards(missing check to see if - there room for new tasks before removing).

3.Added new files :( boardId , boardMembers because we need to save the members of every board , boardDTO ) .

4.we add methos IsBoardMember to check if this is a board member or not .

#### **ColumnBL:**

1.Added a method IsUserAssignee to check if the user is Assignee.

2.Added a new function canTaskBeAdded() to check if a task can be added -

3. Improved the AddTask(TaskBL task) with the new use of the new - function.

#### **TaskBL:**

1.Added new file Assignee.

#### **UserFacade:**

1.changed return type of Register, Login, Logout from string to void, there is -  
"no need to return "success.

2.removed the try-catch in Register, Login, Logout to simplify HandleAuth in  
UseService

3.Added - UserController \_UserController .

3. incorpareted logging into each exception throw.

**UserBL:**

1. shorten the long if in IsValidPassword to parts.

---

**BoardFacadeTests:**

updated tests to fit changes in BoardFacade.

**UserFacadeTests:**

updated tests to fit changes in UserFacade.

**GradingService:**

added the new shell functions.