Tutorial of GitHub Boards

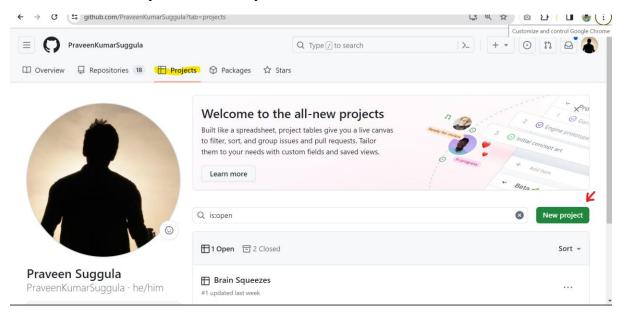
Prepared by: Praveen Kumar Suggula

GitHub Boards are used to organize and prioritize your project work using scrum methodologies. In this documentation, I covered the fundamentals required for software engineering project.

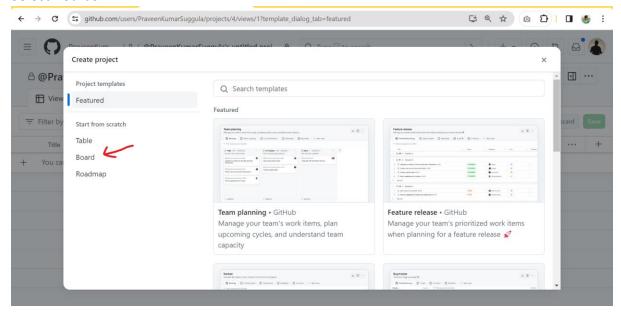
Steps to initialize and use GitHub Boards:

To Create New Project Board:

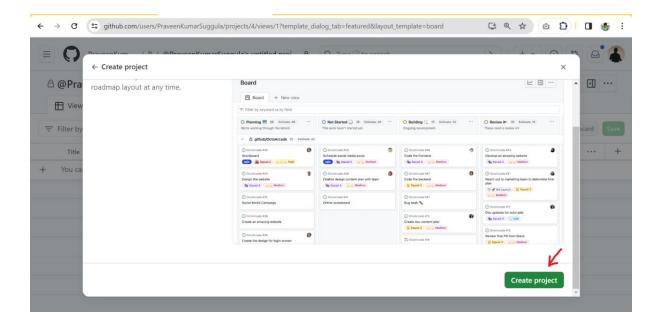
1. Goto GitHub -> Projects -> New Project ->



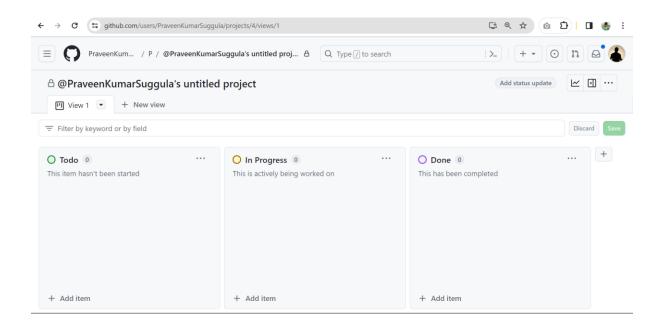
Select Boards ->



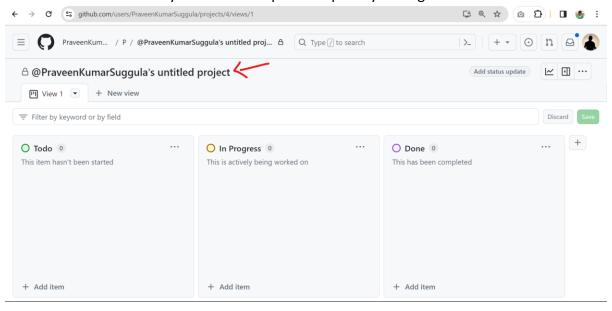
Create project ->



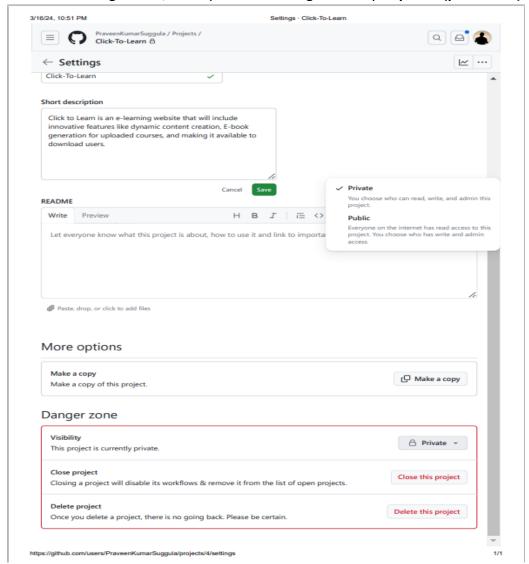
Default board will look like this,



Click on untitled to modify the title and update its privacy settings like we shown below

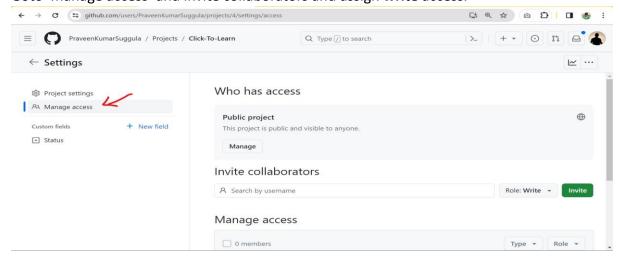


Provide meaningful title, description and change visibility to public (preferable).

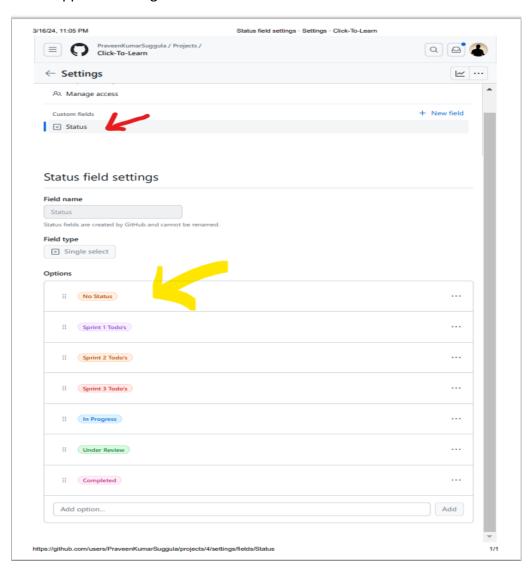


To provide access to your team members or project collaborators,

Goto 'manage access' and invite collaborators and assign write access.

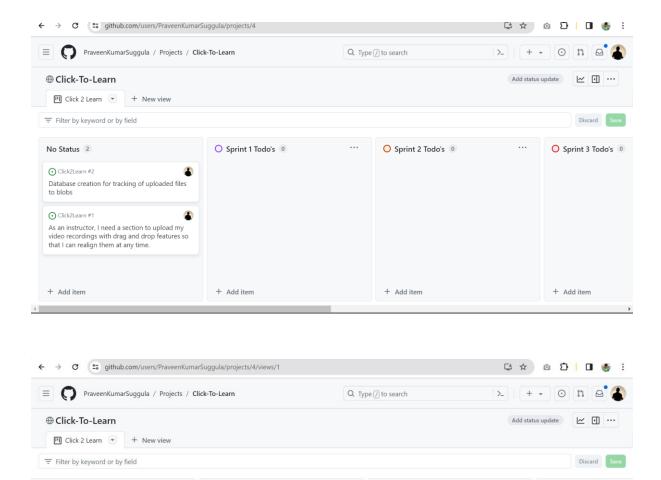


Goto Status Section and modify the fields which will displays in project boards. I suggest this below approach to organize items for this course work.



No Status	Its auto created by default. Newly created and unassigned
	work items are under this section. (backlogs)
Sprint 1 Todo's	Maintain pulled and pending work items in sprint 1.
Sprint 2 Todo's	Maintain pulled and pending work items in sprint 2.
Sprint 3 Todo's	Maintain pulled and pending work items in sprint 3.
In Progress	All currently working sprint items.
Under Review	Work completed but not merged to main branch because
	of pull/merge request is under review by lead/scrum
	master.
Completed	All implemented work items are in this completed section.

Note: For better readability, your team can add 3 completed statuses similar to sprint Todo's like Completed S1, Completed S2, Completed S3.



O Under Review 0

+ Add item

O Completed 0

+ Add item

To create new work item:

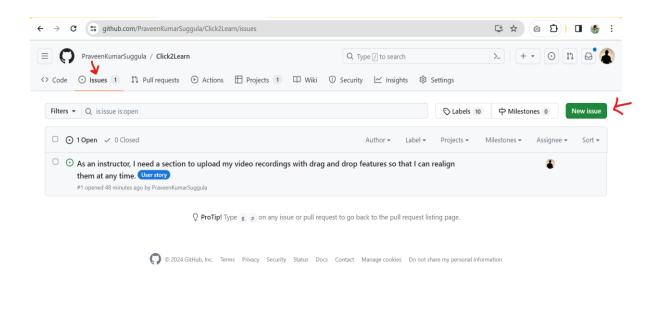
O Sprint 3 Todo's 0

+ Add item

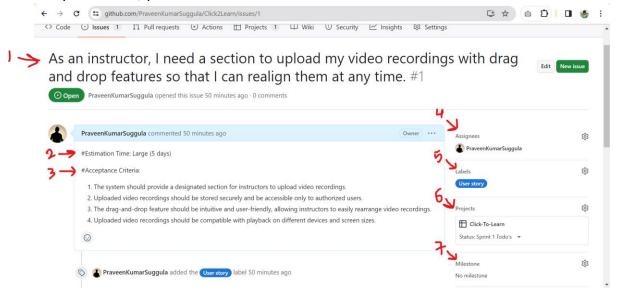
Open your project repository -> Issues -> new issue ->

O In Progress 0

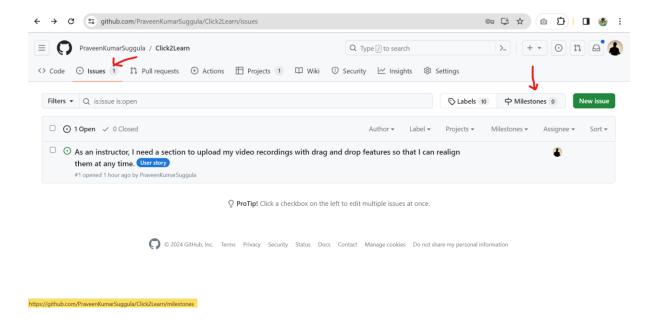
+ Add item



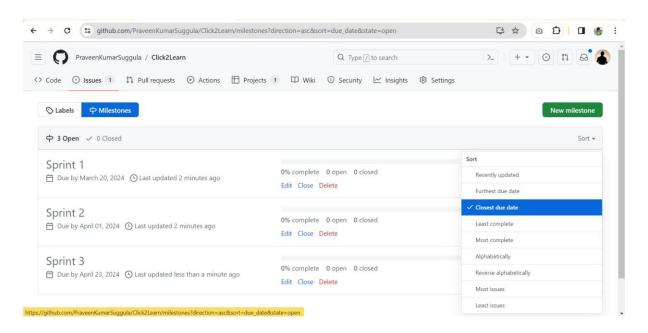
For every work item, you need to include total 7 sections which mentioned below:



To create Milestone:

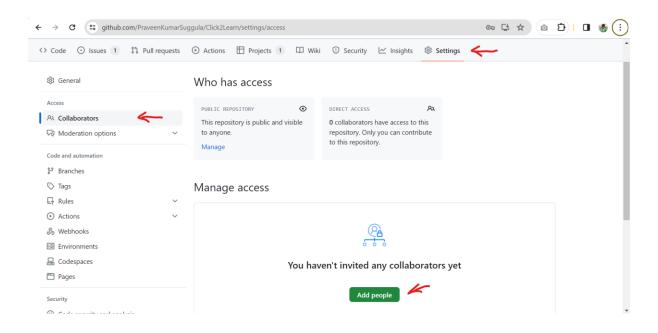


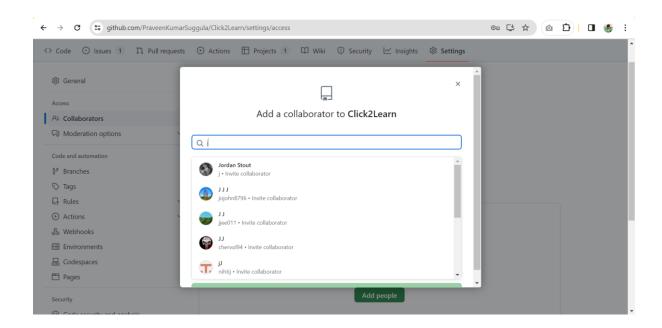
Create milestone with proper title like sprint 1, sprint 2, sprint 3 and provide its deadline. And sort those based on closest due date.



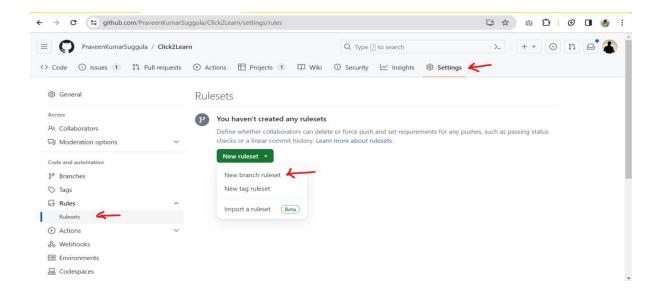
To Add Collaborators: (Team members)

Open repo -> settings -> collaborators -> Add people -> and search for other team members to send access request.

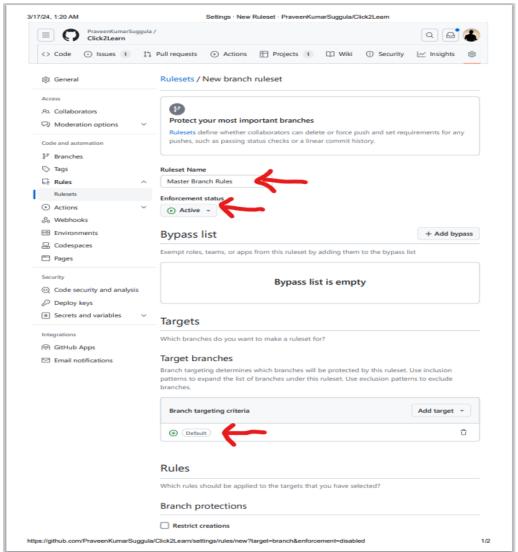


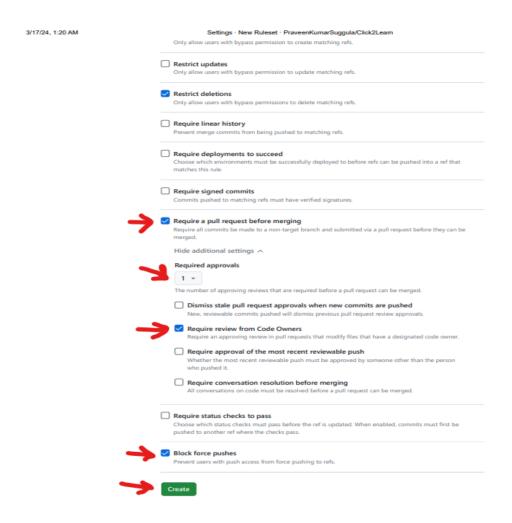


To set Rules/Branch Protection: (Pull Requests)

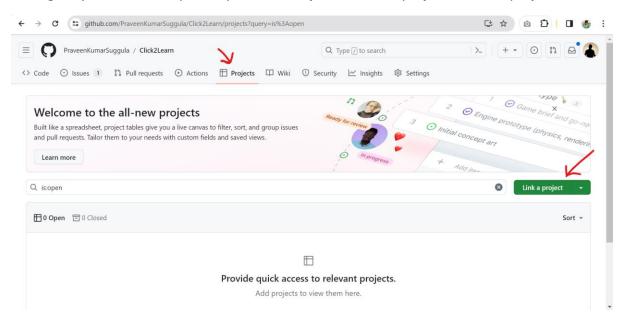


Set your preferred rules like below. One reviewer is sufficient usually Scrum master/Lead/GitHub Owner.

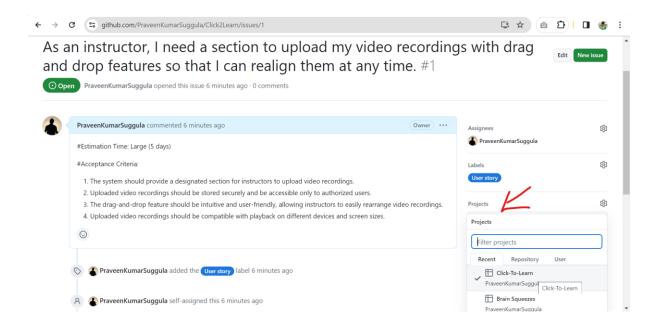




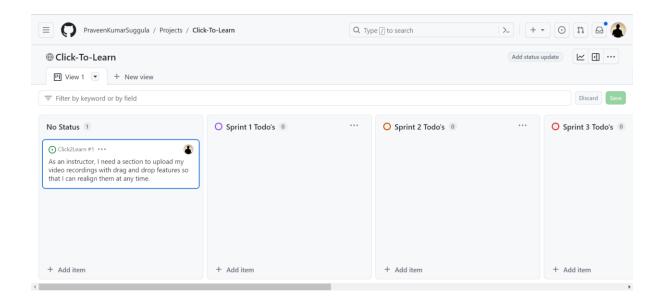
Then goto your GitHub Repository -> Goto Projects -> Link a project -> select project



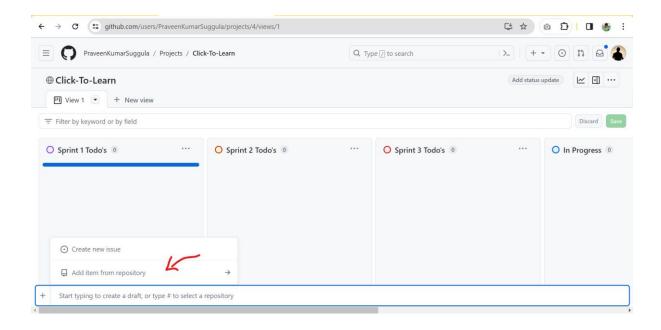
Once after linked project to GitHub repo, Assign previous created tasks to this board. Alternatively, you can import multiple work items directly from project board which will discuss in further.



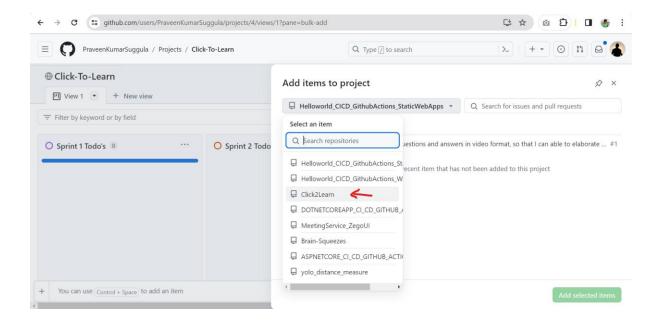
Then those items will visible on your board in no status section. Then you can drag and drop those.

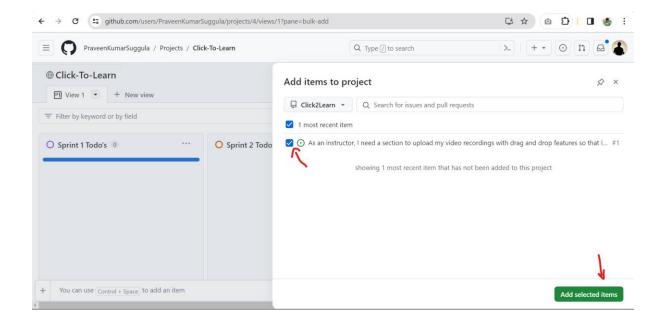


To import multiple existing work item under these sections, click on + Add items -> Add itme from repository.

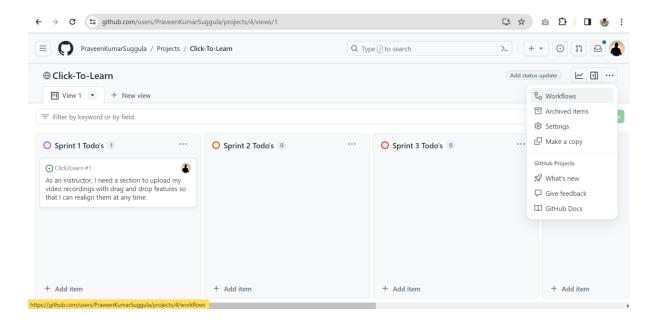


Select your repository and add selected items,

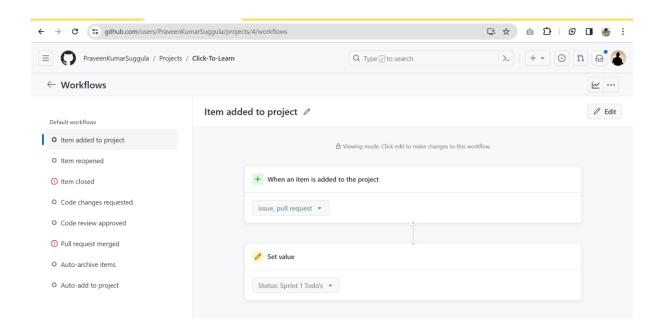




Note: Work items alignment in boards are not automated. If you plan those automation when an event occurs in repository, you need set an automation using 'Workflows'.



There are multiple options available to automate the board alignment, please try those.



You can change your board views and filter work items based on your choice.

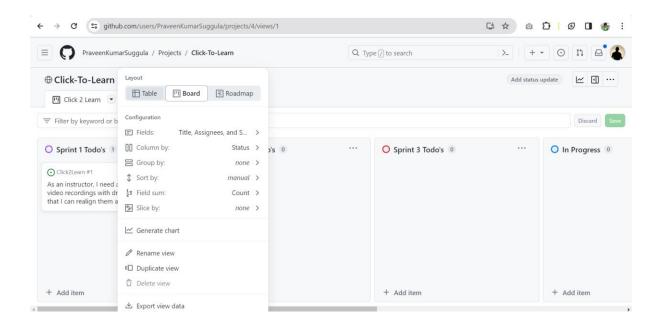
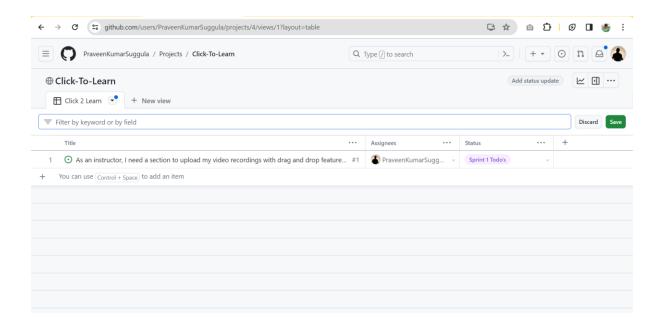


Table View,

- You can filter work items with Assignees, Status, Labels, Milestones, etc.,



Road Map View,

