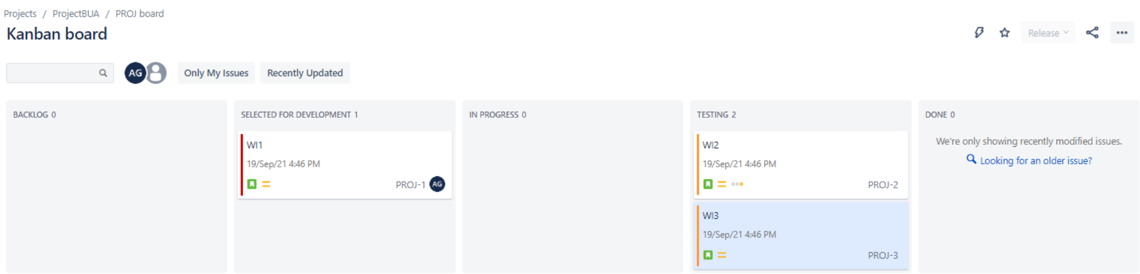
ECSE365L – Agile Software Development
Lab 06 – Configure Kanban board

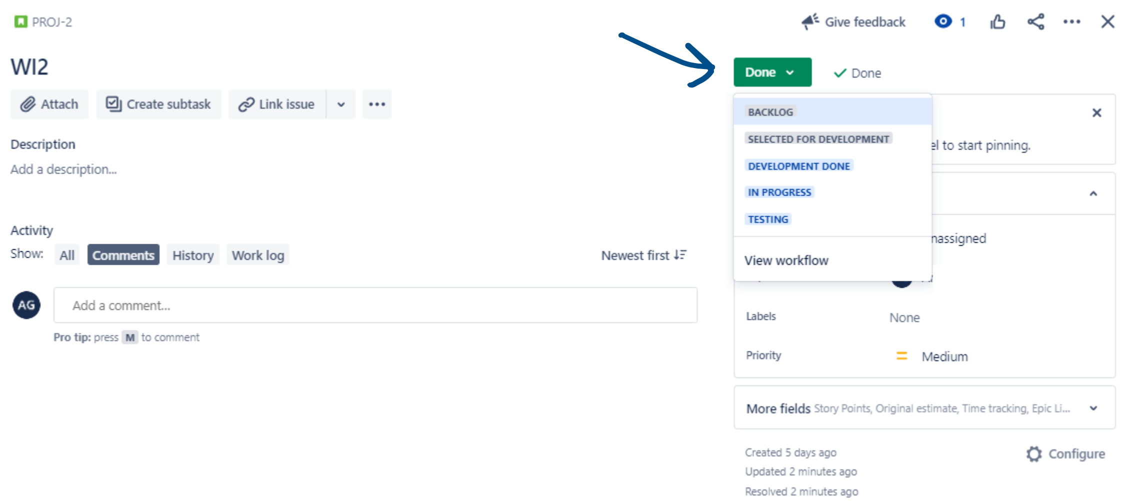
NOTE: Add the faculty as your team member in your project

Move issues through a workflow.

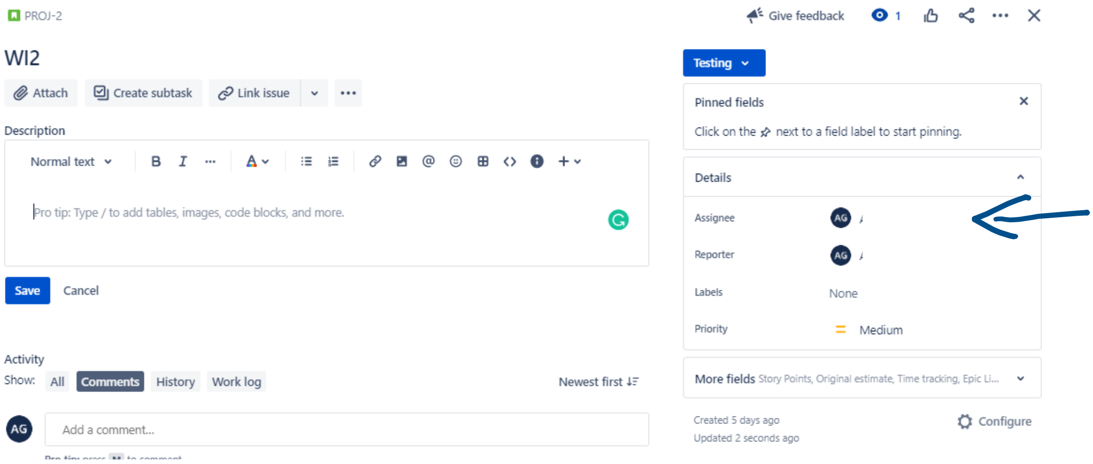
1. Log into Jira (if necessary). https://[your site name].atlassian.net and navigate to your project created in the previous lab.
2. Click on the Kanban board tab in the sidebar to view your board.
3. You should see three issues on the board from the previous company-managed Kanban lab. Drag issues to new columns.



4. Click on an issue to open its details. Notice that the dropdown value in the upper right matches the name of the column on the board. This is the Status field value of the issue. Change the status value. Close the issue details and notice that your issue has changed columns on the board.

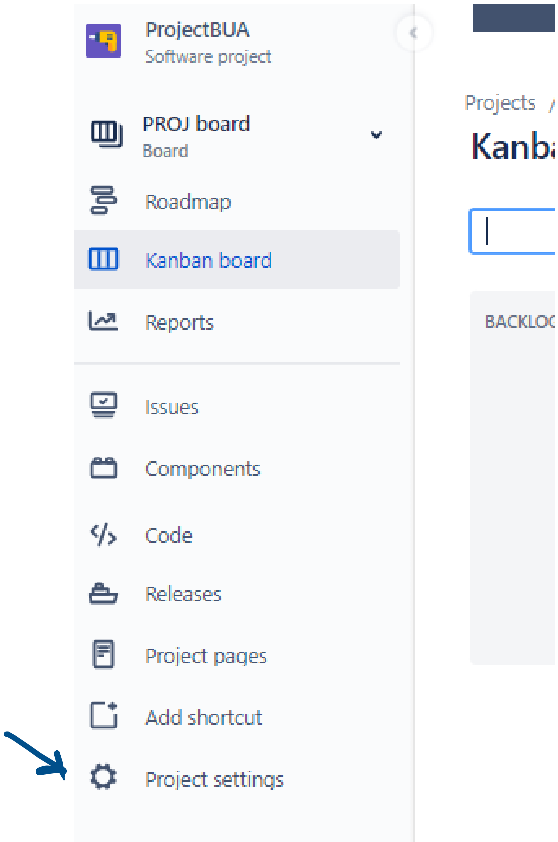


5. Again view an issue's details. Notice that the Assignee field is **Unassigned**. Click on the Unassigned value and select Assign to me. This lets the team know that you are responsible for working on the issue in this status. Close the issue details and notice that your user avatar appears with the issue on the board.

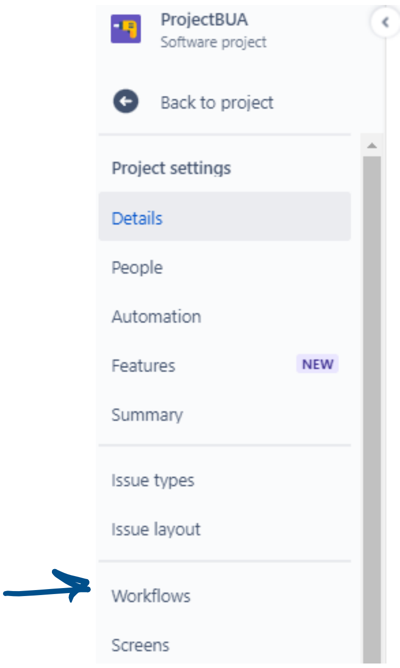


View the default kanban workflow.

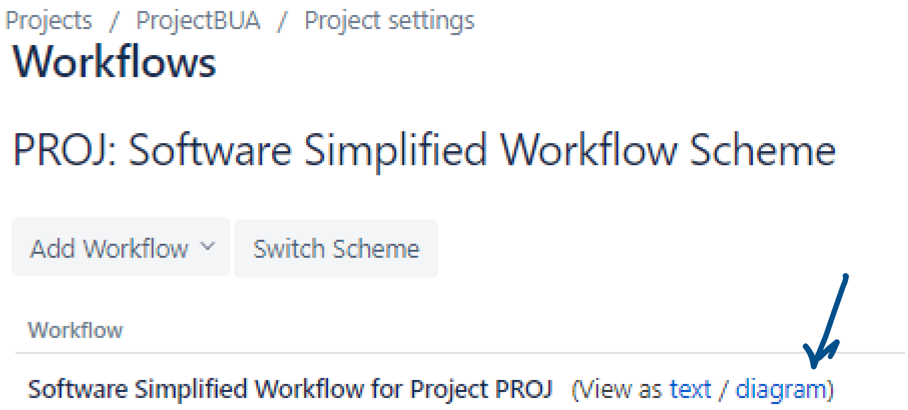
6. While viewing your project, click on the **Project settings** tab in the sidebar. The scope of these settings is limited to the project.



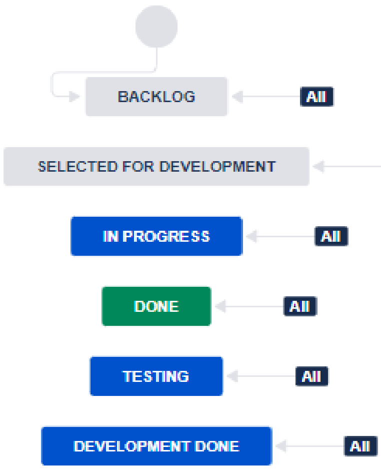
7. Click on the **Workflows** tab in the sidebar to view the workflow(s) for your project.



8. You should see one workflow. Click on the (View as) **diagram** link to view the workflow.



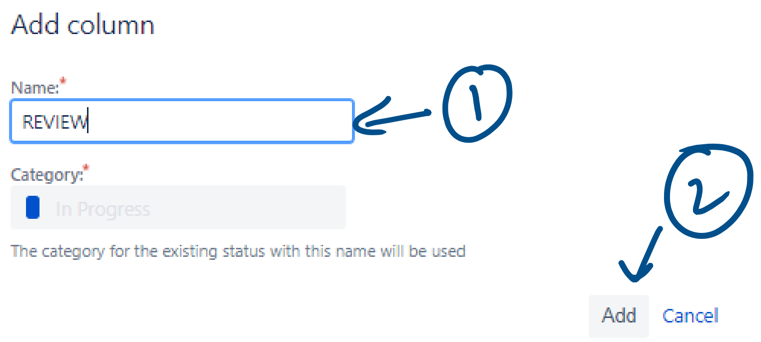
9. Notice that the workflow contains the four default statuses of projects created with the kanban template. Also notice that when you create an issue, its status will automatically be set to Backlog (as indicated by the circle pointing to it). The All boxes means that all of the other statuses in the workflow can transition to this status.



10. Close the workflow diagram.

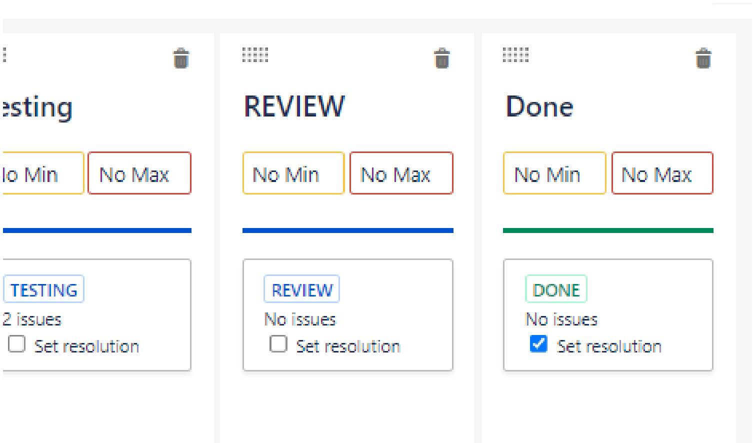
Add a Review column to the board

11. Under the **Columns** tab of your board settings, click **Add column button**. In the Add column window, name the column Review and specify a category of ***In Progress***. Click **Add** to add the column to the board.

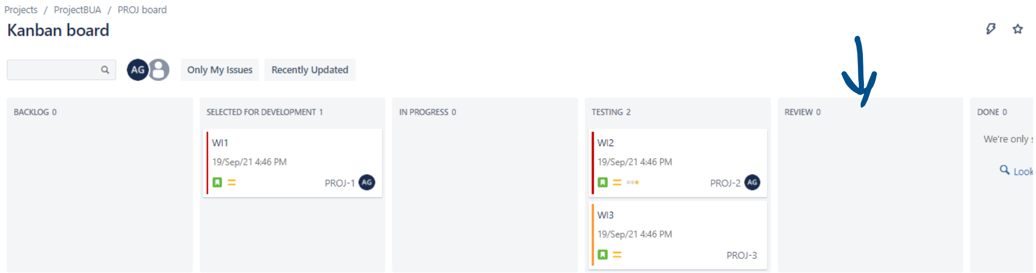


12. You should now see the **Review** column before the Done column. Below the blue bar, you should see that Jira has created a **REVIEW** status for you, matching the name of your column.

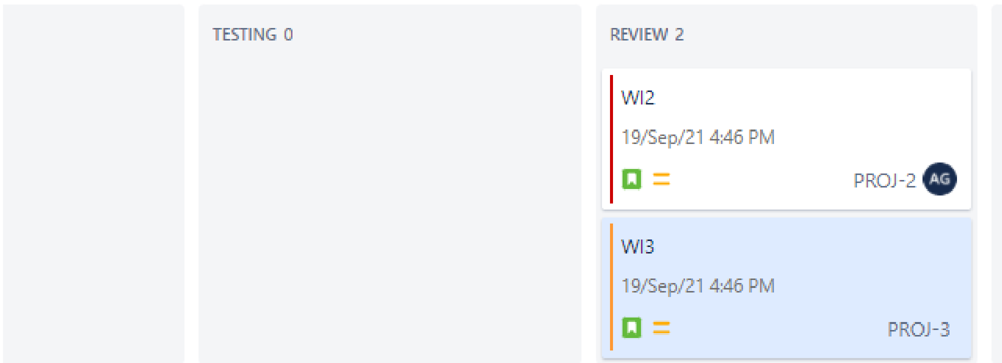
The text of the **REVIEW** status is blue, indicating that the category for the REVIEW status is ***In Progress***. In the **REVIEW** status, the **Set resolution** checkbox should remain **UNCHECKED**. Checking this would set an issue's resolution field when it is moved to the **Review** status. We don't want to check this, because checking it would mean that issues in this status were resolved or closed.



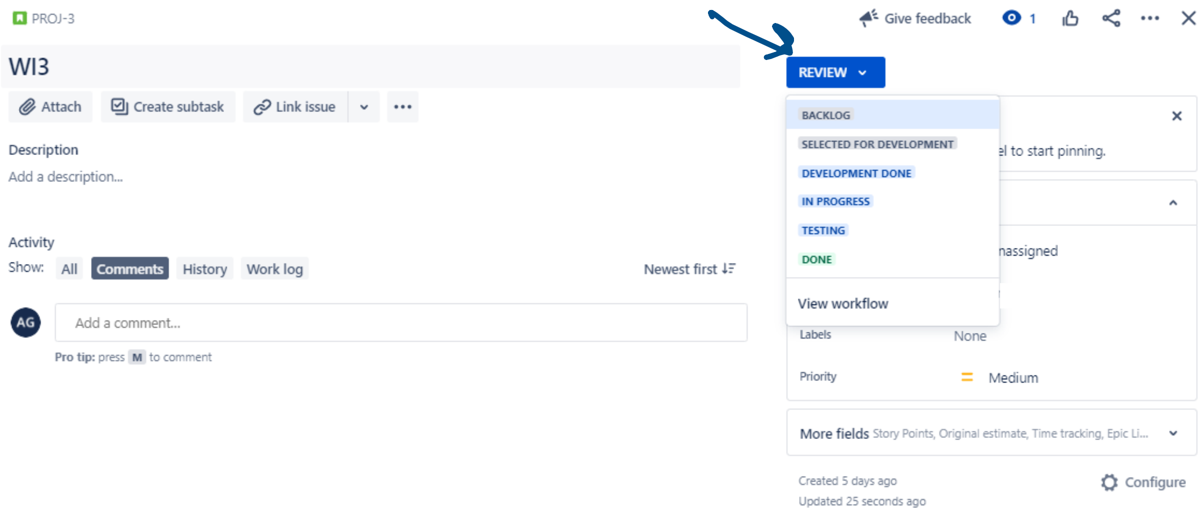
13. Click the Back to board link in the upper right. You should see the **Review** column on your board.



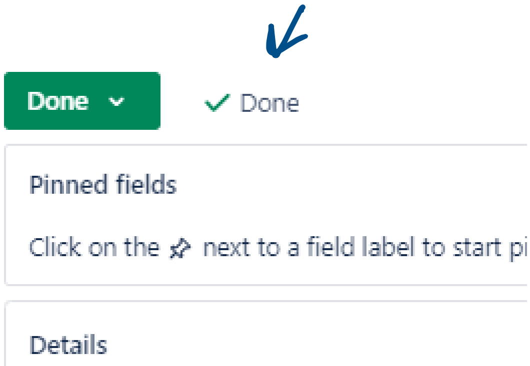
14. Verify that your Review column is working. On your board, drag issues to the **Review** column.



15. View an issue's details and change the **Status** to and from a value of **Review**. The issue should move to the new column on the board.

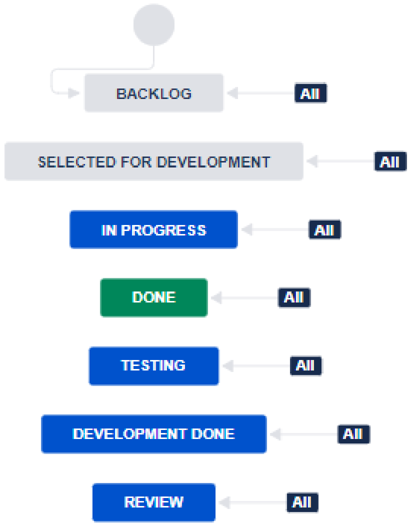


16.From the board, open any issue. In the dropdown in the upper right, change the status of an issue to **Done**. Notice that a checkmark and Done indicator are shown next to the status. This indicates that the **Resolution** field is set to **Done**.



17.Change the status to **Review**. Notice that the Done checkmark and indicator are gone. This is because we didn't check the **Set resolution** checkbox when configuring the **Review** column. The **Resolution** field is cleared.

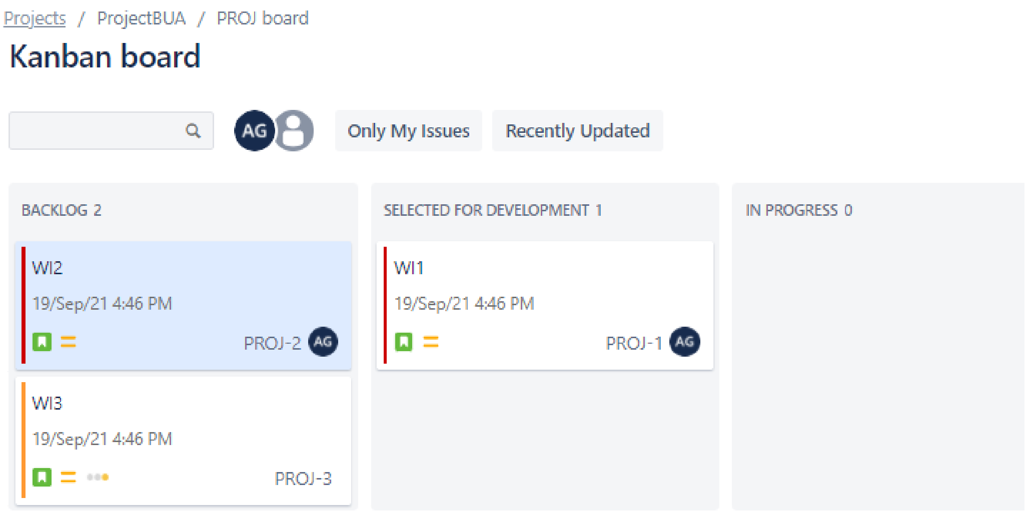
18. Using the same procedure that you used earlier, view the workflow diagram under **Project settings**. You should see the **Review** status. You should also see that all other statuses are allowed to transition to **Review**. Jira added this status to the workflow when you added the **Review** column. The actual order of the statuses in this diagram does not matter, since all statuses are allowed to freely transition to other statuses. The order on a board is specified in board settings.



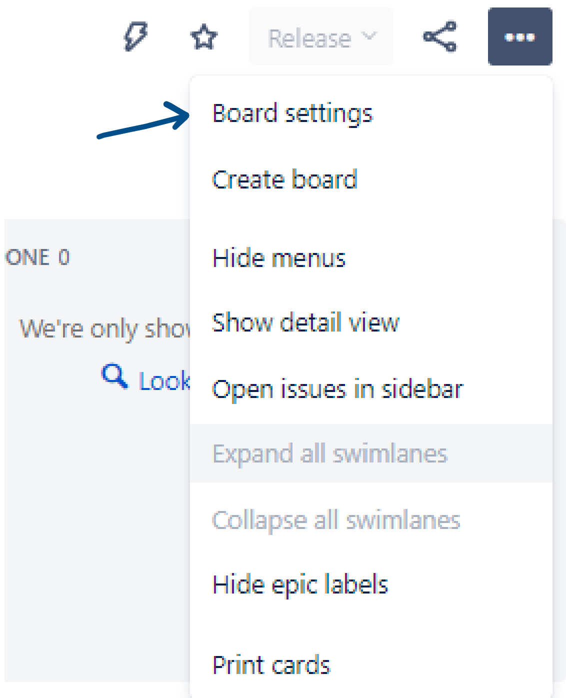
19. Navigate back to your board.

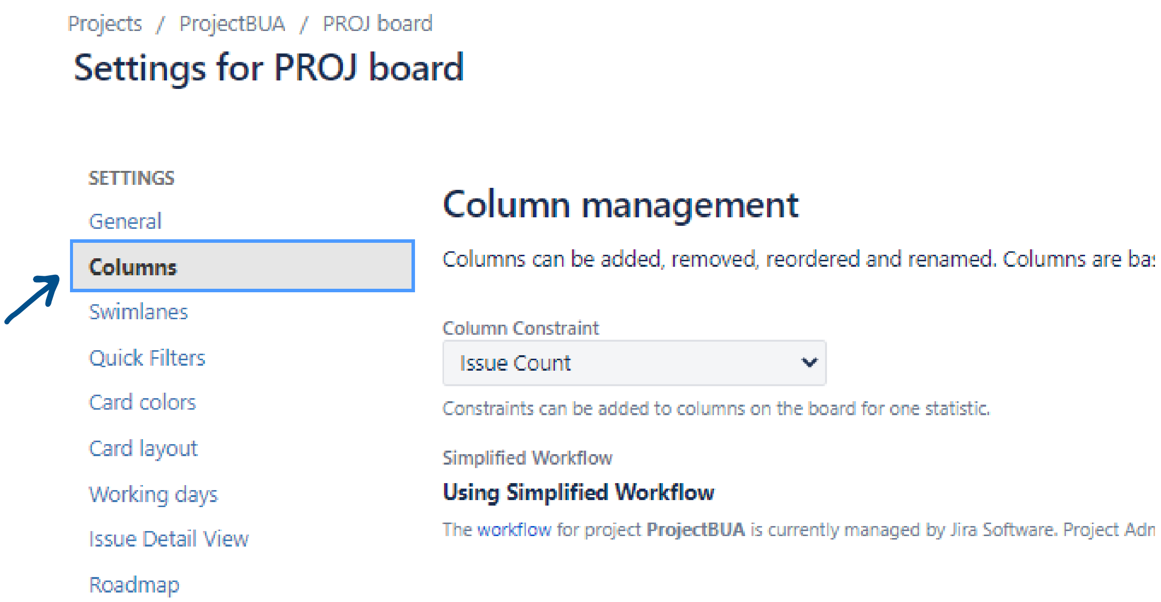
Configure a Kanban board to use a separate backlog

1. In your company managed project, move some issues to the **BACKLOG** column of your Kanban board.

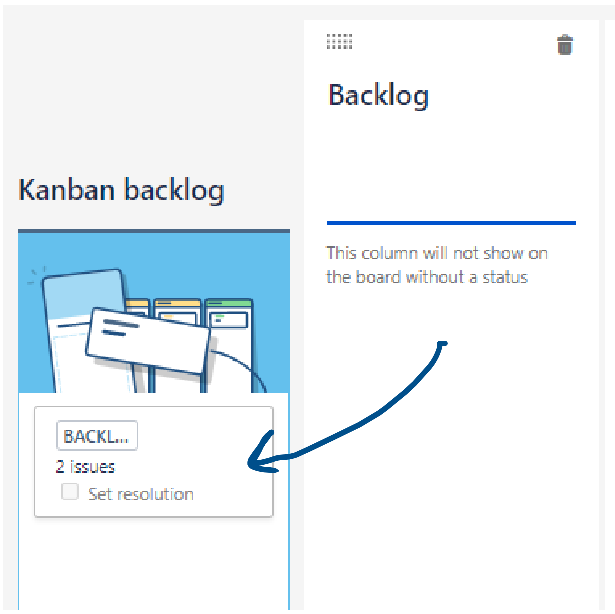


2. Navigate to the board settings (→ Board settings) → Click the **COLUMNS** tab





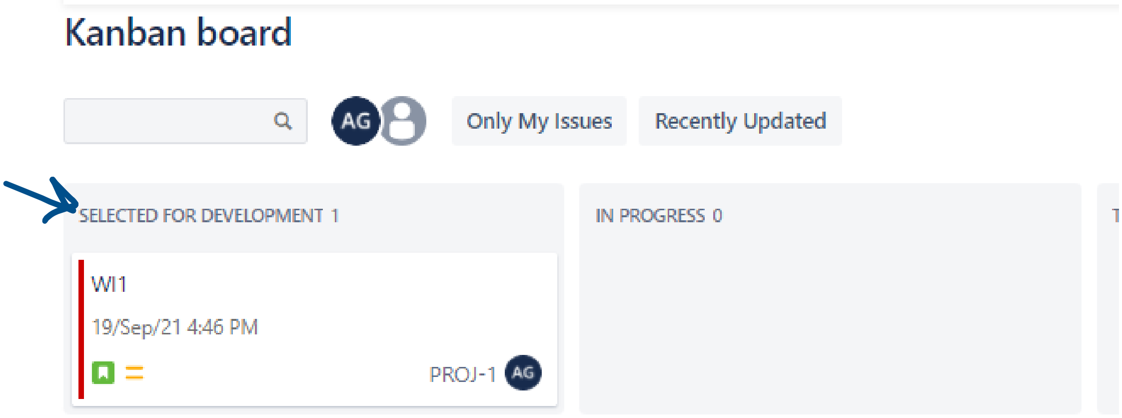
3. Drag the **BACKLOG** status (the box at the bottom of the backlog column- not the column itself) from the first column to the Kanban backlog section on the left.



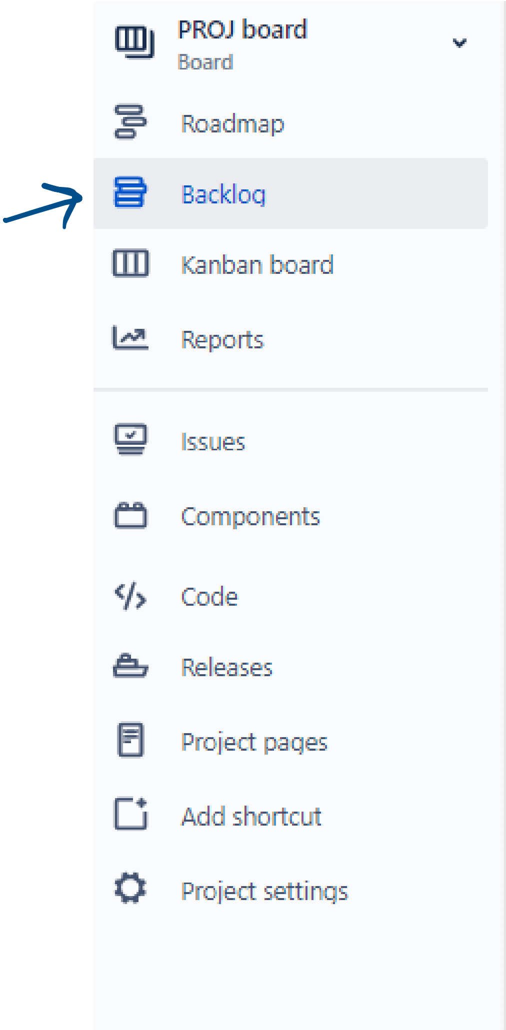
4. You should now see the **BACKLOG** status in the Kanban backlog and the **BACKLOG** column of the board should not contain any statuses.

Note: You can drag any status(es) except DONE to the Kanban backlog. The status does not have to be named **BACKLOG**.

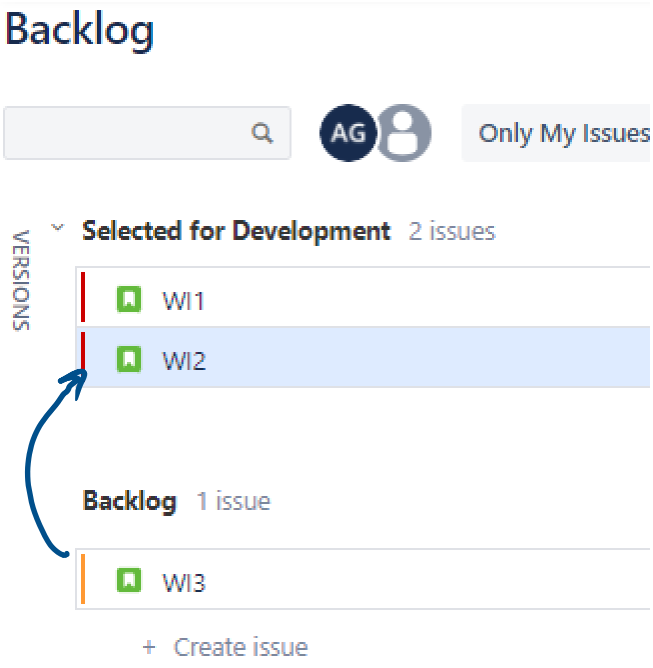
5. View your Kanban board. You should now see **SELECTED FOR DEVELOPMENT** as the first column. The **Backlog** column has been moved to the Kanban backlog.



6. Click on the **Backlog** tab (this was added by Jira when you enabled the Kanban backlog).

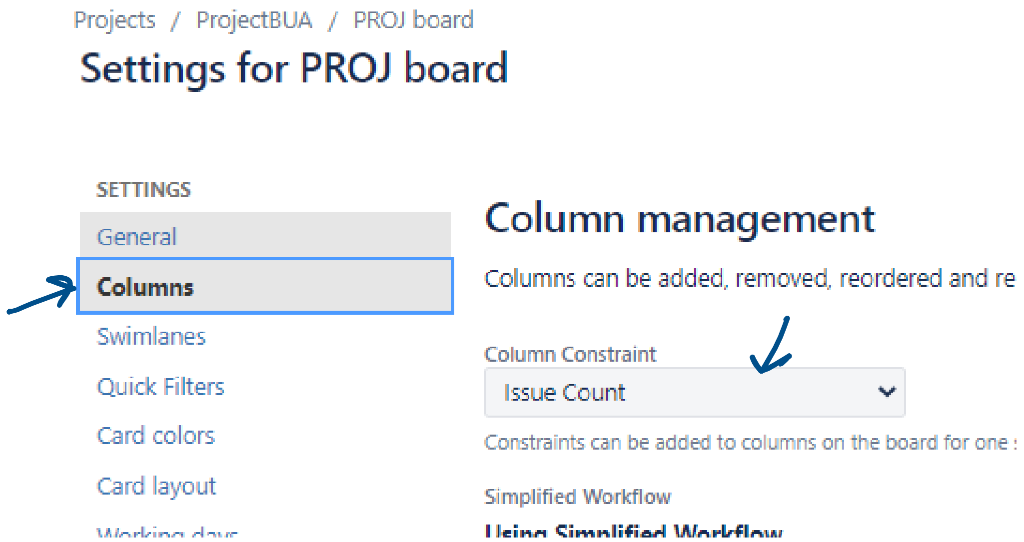


7. Move issues between the backlog and the first visible column on the Kanban board (**Selected for Development**). This is where you can work on the backlog while the rest of the team is focussing on the issues that are ready to be worked on.



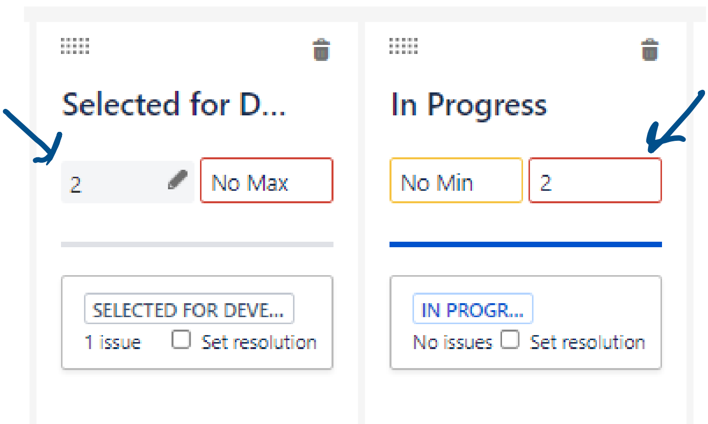
Assign work in progress (WIP) limits on Kanban board columns

1. From your project's Kanban board → click the **...** button → select Board settings → Click the Columns tab.
2. Verify that the Column Constraint is set to **ISSUE COUNT**.

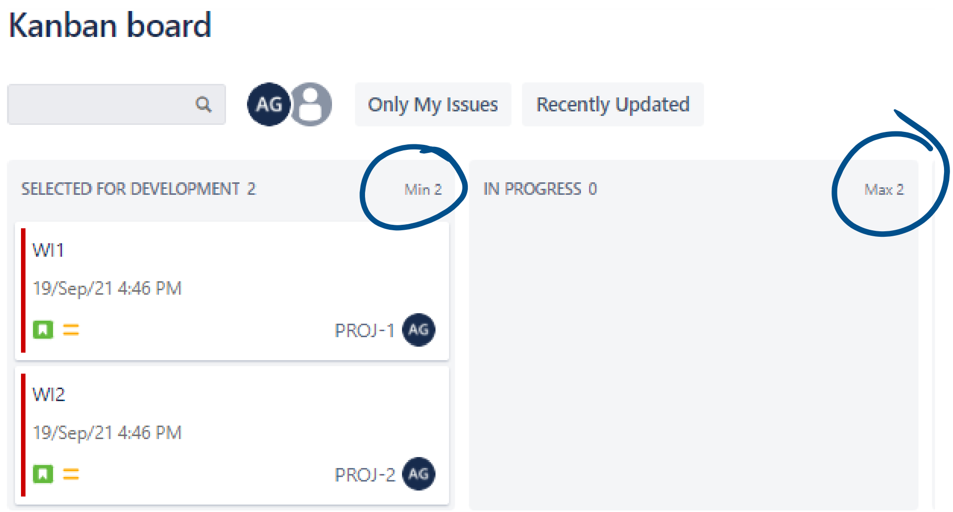


3. In the **Selected for Development** column, specify a minimum issue count of 2.
   - The column will be highlighted if there are less than two issues in the column.
   - Denotes that more issues need to be added to the column.

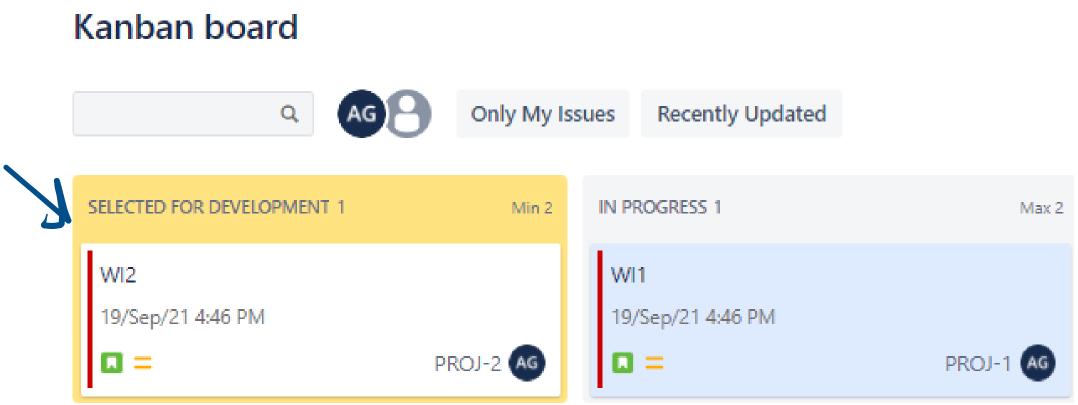
4. In the **In Progress** column, specify a maximum issue count of 2.
   - The column will be highlighted if there are more than two issues in the column.
   - Denotes that there is too much work- in-progress in that column.



5. Click Back to board → you should now see a **MIN 2** indication in the **Selected for Development** indication in the column and a Max 2 indication in the In Progress column. These are the WIP limits.

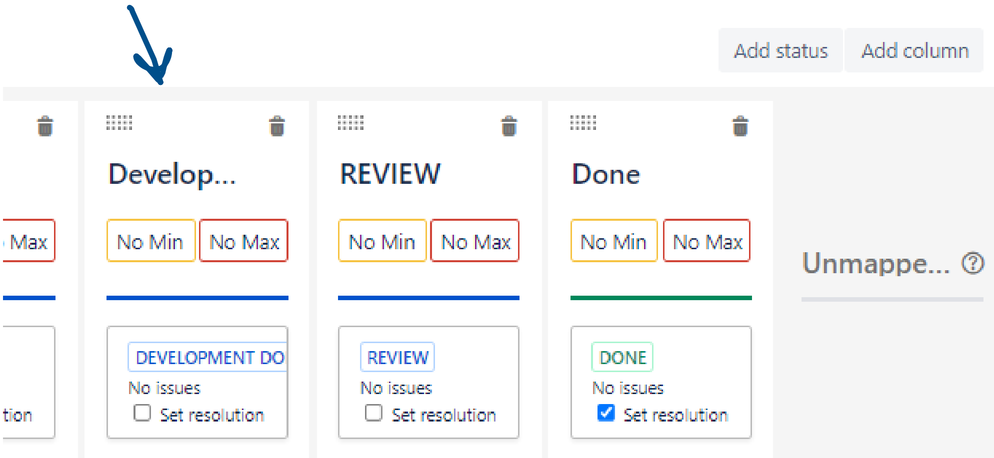


6. Drag issues to the columns to violate the constraints. You may need to change the status of issues in the backlog. You should see a highlighted column when the minimum or maximum constraint is violated.

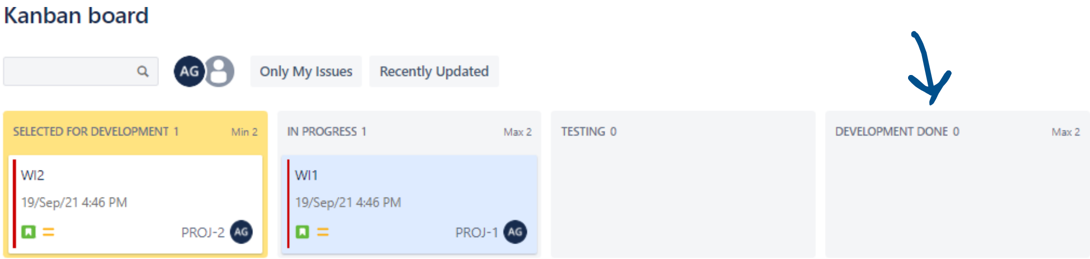


Add a "Development Done" column as a queue

1. Using steps like the previous lab, add a **Development Done** column (which also adds a status) to your Kanban board. Make sure to drag it to the column before **Review**.

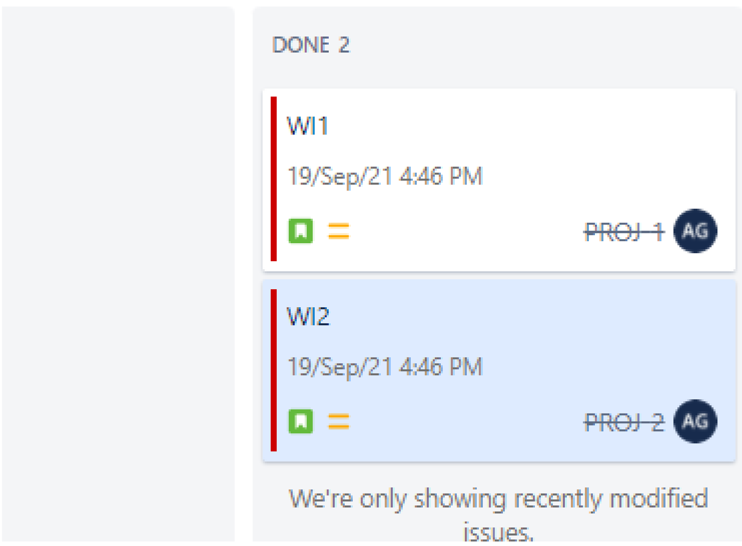


2. Set a WIP limit of **Max 2** for the **Development Done** column.
3. Test that your new column is working as expected.

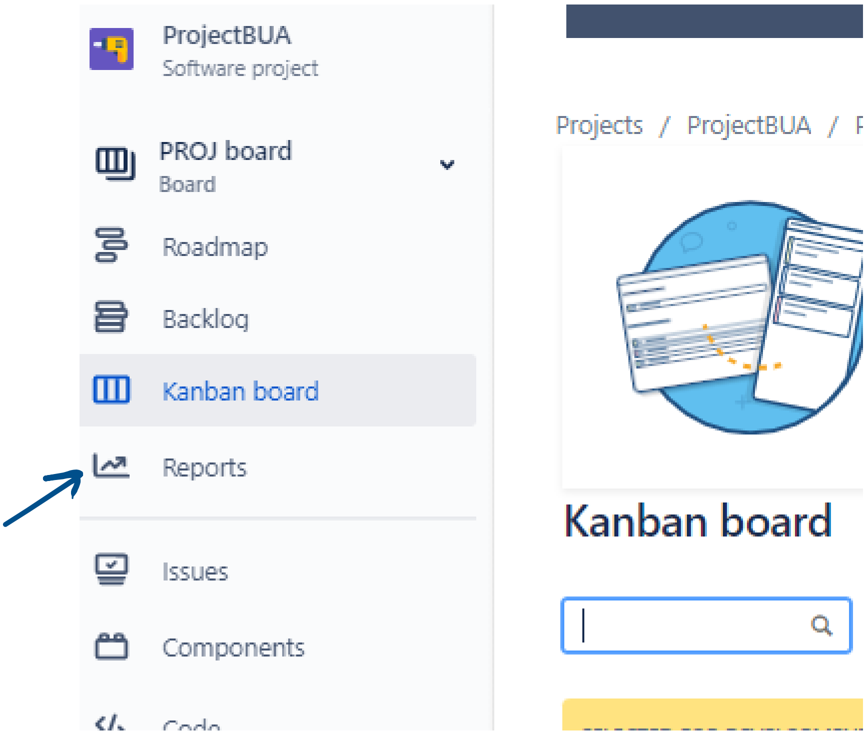


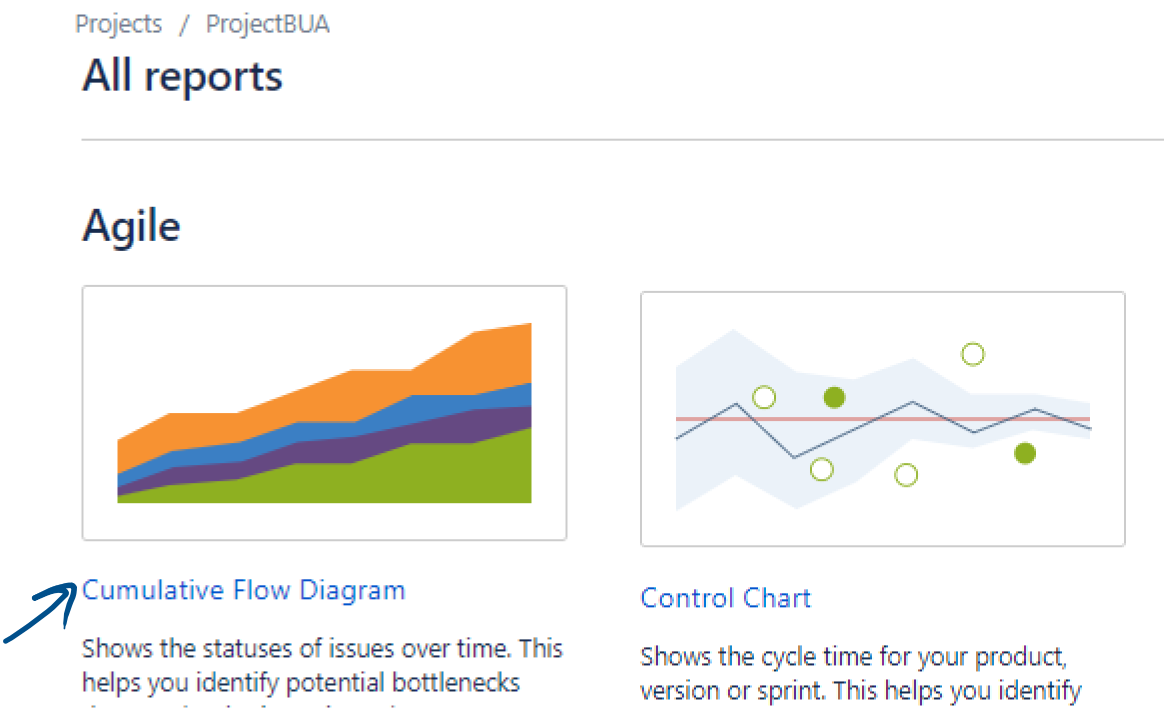
View a cumulative flow diagram

1. Move all issues of the project to the **DONE** column.



2. Click on the **Reports** tab in the sidebar → Click on **Cumulative Flow Diagram**.

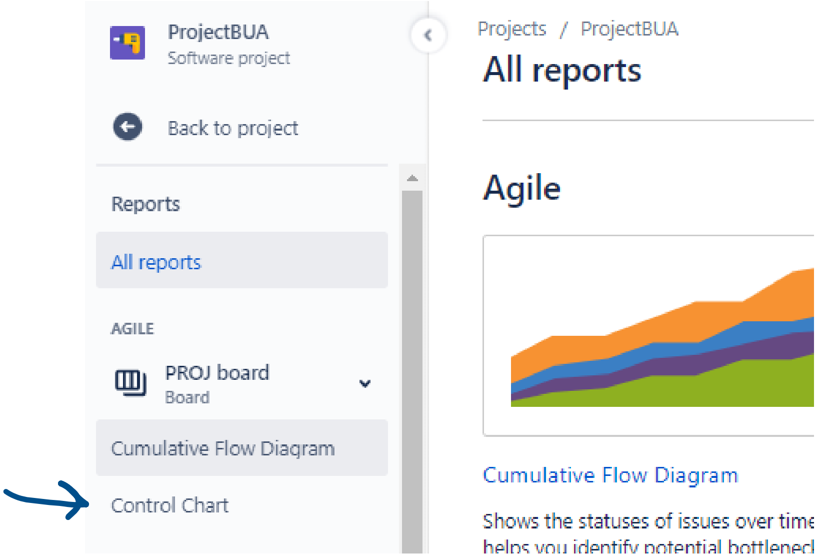




3. Zoom into any section of the report by clicking and dragging the cursor across the top chart or the small chart below it. You can double-click on the small chart to reset the top chart

View a cycle time control chart

1. Click on the **Control Chart** tab.



2. View the chart. This shows the cycle time for the issues of the project. This is the time between when an issue is moved from the backlog to **In Progress** until the time that the issue is moved to the **DONE** column. Use the controls below the chart to change the horizontal timeframe of the chart.
    - This chart also might not look that great. A continuously improving team should show a cycle time that decreases over time.

Take a snapshot of your kanban board and insert in a word file. Submit the MS Word file as your lab assignment.

Ref: Altassian