Practicing Kanban Using Jira

Accentient™

2023.10

ACCENTIENT EDUCATION SERIES

Committed to training success

www.accentient.com

Practicing Kanban Using Jira

Course Number:	**PKJ**
Version:	**2023.10**
Software version:	**Cloud**

Images and Artwork

Disclaimer

While Accentient takes great care to ensure the accuracy and quality of these materials, all material is provided without any warranty whatsoever, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

Practicing Kanban
Using Jira

Course Introduction

Accentient

- A leader in DevOps, Scrum, and Kanban knowledge
- Helped thousands of teams and individuals understand and implement Scrum and DevOps tools successfully
- Course creator and steward for Scrum.org
- Has trainers that are Professional Scrum Developers, Professional Scrum Trainers, and authors

www.accentient.com | @accentient

Prerequisites

- Familiar with software development lifecycle
- Familiar with team-based development
- Familiar with Kanban
- Familiar with Atlassian Jira

Accentient

Kanban Team Formation

5 MIN

- Form into teams of five (5) members or less
- Make sure experts aren't all on the same team …
  - Kanban/Agile experts
  - Atlassian Jira experts
  - Architecture/design experts
  - Programming experts
  - Testing experts
- Collocate your team
  - Physically or virtually
- Name your team

Accentient

Introductions

- Name
- Title/Role
- Development Experience
- Kanban/Scrum/Agile Experience
- Atlassian Jira experience
- Expectations

Course Overview

- This course shows you how to configure and use Jira to effectively practice Kanban and achieve flow
  - Kanban theory, principles, and practices
  - Defining workflow
  - Visualizing work
  - Limiting work in progress (WIP)
  - Actively managing WIP
  - Inspecting, adapting, and improving flow

Course Backlog

1. Introduction to Kanban
   - Theory, principles, and practices
   - Support for different types of work
2. Visualizing the Workflow
   - Defining the workflow
   - Setting up and using the Kanban board
3. Limiting Work in Progress (WIP)
   - Setting up and using WIP limits
   - Experimenting with WIP limits
4. Managing for Flow
   - Flow-based metrics and analytics
   - Inspecting, adapting, and improving flow

Accentient

Our Jira Cloud Environment

- We will be forming into teams and each team will …
  - Be collocated (physically or virtually)
  - Have its own Jira Cloud instance
  - Collaborate on all work in this class
- Each team member will …
  - Need to provide an email address

Jira

- Note: We will be using a company-managed instance, rather than a team-managed instance
  - As such, features, capabilities, and behavior will be different

Accentient

Our Case Study: Fabrikam Fiber

All hands-on activities will focus on a fictitious company named *Fabrikam Fiber*, and its two teams: a support (red) and a product development (green) team.

Working as a team, in a shared instance of Jira Cloud you will see how to support Kanban and help a team achieve flow

Schedule and Logistics

- Breaks
  - When should we have breaks?
- Labs
  - Labs can be breaks too
- Lunch
  - When should we break for lunch?

Collaborating as a Team

- There are many opportunities for collaboration in this course
  - Some tasks, however, must be performed by *one* team member
- All tasks will be marked with an appropriate icon …

The team can self-organize and execute the task however they decide
Only the “leader” should execute this task
Only the “followers” (not the leader) should execute this task
Everyone on the team should execute this task
Everyone on the team should execute this task (working in pairs)

Practicing Kanban
Using Jira

Module 2

Visualizing the Workflow

Module Backlog

- The Kanban Board
- Defining the Workflow
  - Mapping in Jira
- Making Policies Explicit
  - Classes of Service
  - Creating swimlanes
- Creating Additional Boards
  - Creating Additional Workflows
- Lab

Visualizing the Workflow

Kanban Core Practice

- Teams have a high-level routine for producing features or improvements

Take an item from the backlog → Specify work → Implement it → Validate it → Deliver it

- For teams with formal methods, complex procedures, or who follow standards (governance and compliance), they may have multiple steps within each step

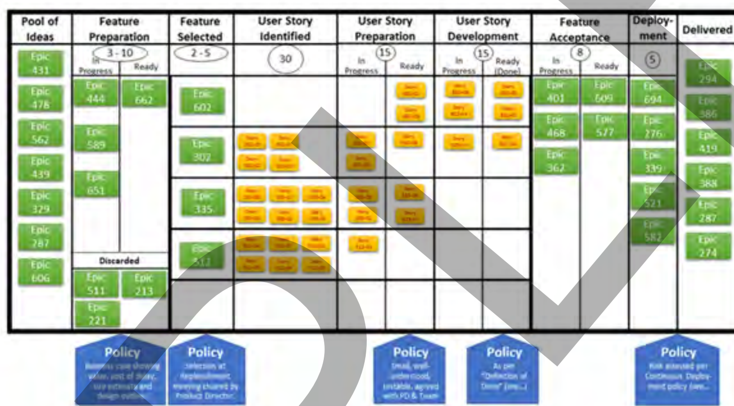
Accentient

The Kanban Board

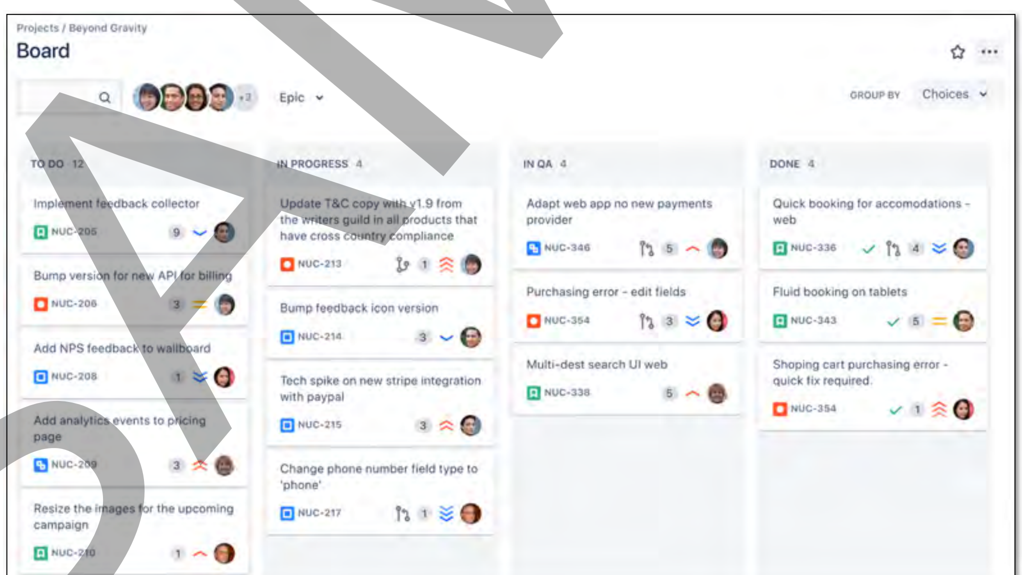
Accentient

The Kanban Board

- Knowledge work is invisible, therefore it's necessary to visualize the workflow using a Kanban board
- The board can visualize the work as well as the workflow



The Jira Kanban Board



The Kanban Board vs. the Backlog

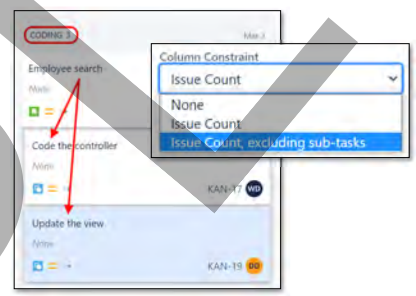
- A Kanban board turns a linear backlog into an interactive, two-dimensional board, providing a visual flow of work
  - As work progresses from idea to completion, a team updates the issues on the board
  - This visualization makes transparent the current issue's progress or lack of progress
- Note: A Kanban backlog can be enabled provide more space and focus on refining and prioritizing new issues

The Kanban Board vs. the Scrum Board

- Kanban boards track issues, are sprint-independent, and provide flow metrics for monitoring (and improving) flow
  - Kanban boards primarily track epics, stories, and bugs
  - The plan is represented by the columns
- Scrum boards (a.k.a. task boards) are associated with a sprint and are typically used by Scrum teams
  - Scrum boards typically track sub-tasks
  - The plan is represented by the cards/sub-tasks

Showing Subtasks on the Kanban Board

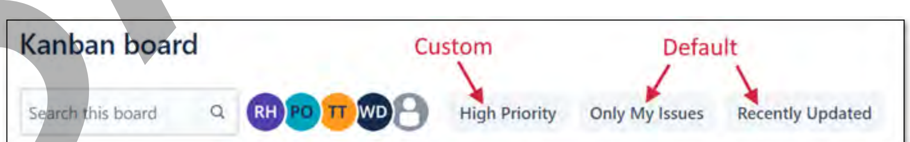
- Subtasks typically represent the plan, or the actual work to be done
  - Examples: Analysis, design, code, test, document, deploy, etc.
  - Kanban teams don't typically use subtasks because the plan is expressed by the columns themselves
- Some Kanban teams may still want to use Subtasks
  - By default they show on the Kanban board, but they will need to be dragged independent of their parent
  - By default Subtasks count a Work in Progress (WIP) but this can be changed under Board settings



Accentient

Quick Filters

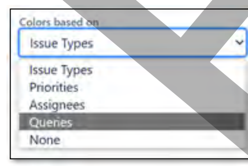
- The Kanban board has a standard search feature, but also supports *Quick Filters*
- You can use Quick Filters to switch between:
  - Different issue types (e.g. show only bugs)
  - Different priorities (e.g. show only High priority stories)
- There are two Quick Filters but you can create your own

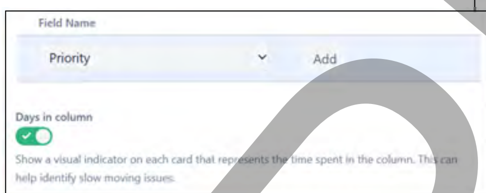


Accentient

Styling Cards

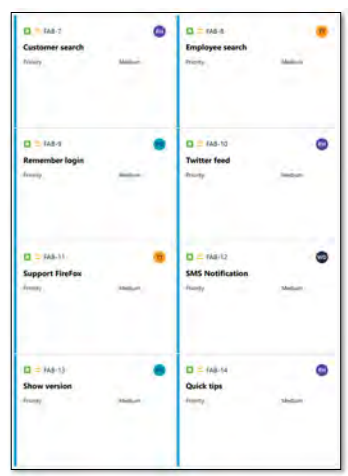
- Cards on the Kanban board can be styled in many ways:
  - Coloring based on pre-defined settings
  - Coloring based on a custom Query (JQL)
  - Displaying additional fields
  - Displaying indicator of days in column





Printing Cards

- Some teams prefer physical boards
  - Jira can help by printing out the cards
  - Single, multiple, or all cards can be printed
- The printed cards fit on A3, A4, or Letter-sized pages in either portrait and landscape modes



Defining the Workflow

Step 1: Choose the Right Workflow

- Prefer continuous, collaborative workflows
  - These are ones that involve orderly cooperative activities by multiple people or teams
- Don’t create a Kanban board for a process with no clear flow of work or ordered activities
  - Examples: Processes that require immediate decision-making, have sudden scenario changes, or require a creative effort with lots of subjectivity

Step 2: Map Each Step

- As a team, identify and understand each step
  - Maybe start by defining the users/players
- Pay attention to *when* a work item changes hands
  - This will define the board columns
- Identify any (potential) bottlenecks
  - These could be steps where there is a great possibility of a delay, lack of people (resources), or some other risk to flow

- <u>Tip</u>: Don't try to improve, optimize, or perfect the process at this point. That will come later.

Tip: Identify Those Steps Your Team Does *Not* Do

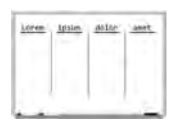
- Identify those steps which are beyond your team's control
  - Work diligently to remove these dependencies
- Leave out the steps that occur *before* items reach your team
  - <u>Examples</u>: High-level planning, budgeting, specifications
- Leave out the steps that take place *after* items are delivered
  - <u>Examples</u>: Training, support, marketing

- Visualizing workflow may make transparent the need to combine teams (or split them)

Tip: Combine Steps as Needed

- If 2+ sequential steps are usually performed together, combine them
  - Example: Writing code + writing unit tests + code review may become a single "Implement" step
- Once work is flowing smoothly, revisit these steps to see if quality and/or throughput can be improved by splitting

Step 3: Create the Columns

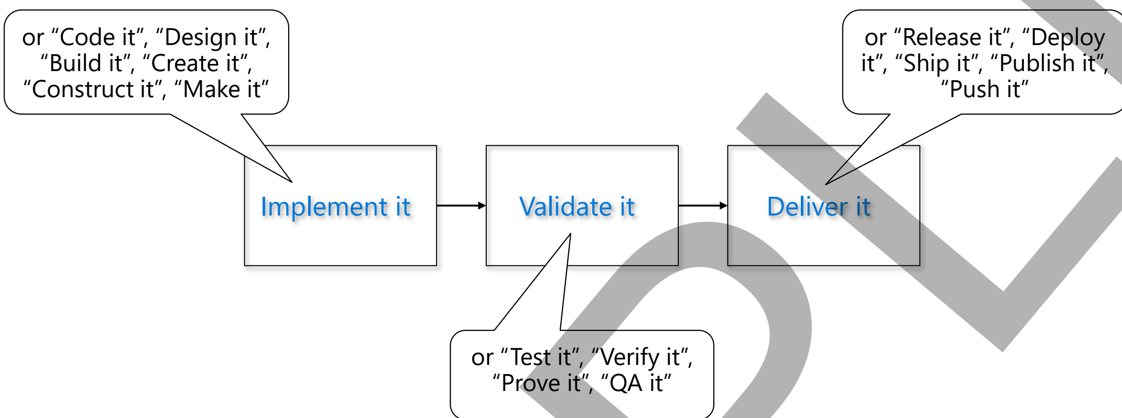


- Create the columns that your team has identified using simple, agreed-upon names
  - The first (leftmost) column is typically a *backlog* or *queue*
  - The next column is where the workflow starts (e.g. "Analyze")
  - The rightmost column is where the workflow ends (e.g. "Done")
- You can have as many (or as few) columns as is necessary

Backlog	Analyze	Develop	Test	Done

Tip: Keep it Simple

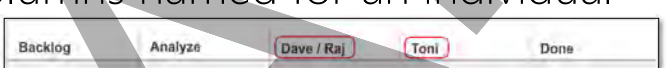
- Although you want to start with what you do now, if you have any doubts, consider these fairly common steps …



Accentient

Tip: Things to Avoid

- Too many columns
- Columns named for an individual



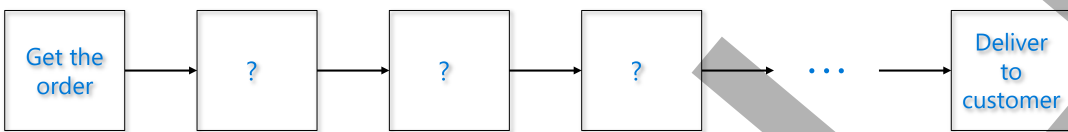
- Columns for "blocked" items
- Not having a clear starting and finishing column
- Using the first (leftmost) column for WIP

Accentient

What would your workflow look like?

5 MIN

As a team, define *your* workflow for creating a pizza …

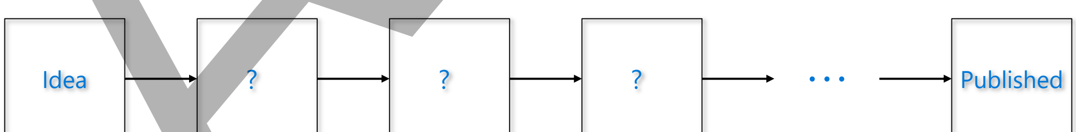


Accentient

What would your workflow look like?

5 MIN

As a team, define *your* workflow for writing a blog post …

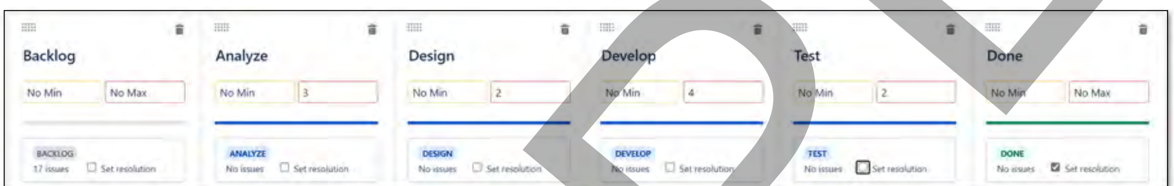


Accentient

Mapping Your Team's Workflow in Jira

- The Kanban board displays the default workflow

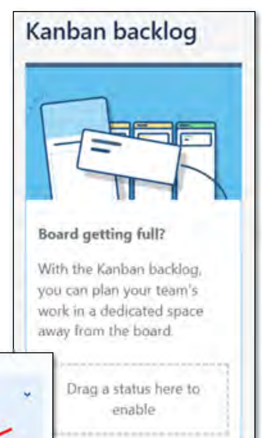
  - The actual columns vary based on the project type and template
  - Your team's workflow stages will most likely be different
- After identifying the stages of the workflow process, they can be mapped to the Kanban board as columns and related statuses

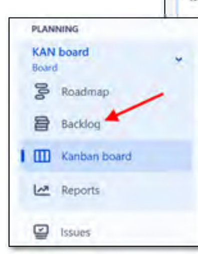


Accentient

Enabling the Kanban Backlog

- Teams are welcome to manage their backlog in the first column of the Kanban board
  - This works well if the project only contains a few issues; but, as the backlog grows, viewing and scrolling through these issues can become difficult
- This will need to be manually-enabled for a Kanban project
  - This keeps the Kanban board free from distractions to focus on work in progress





Accentient

Making Policies Explicit

Make Policies Explicit

Kanban Core Practice

- Explicit policies are a way of articulating and defining a process that goes beyond the basic workflow definition
  - Making workflow and policies transparent enables the team to tune their process using experiments
- Examples
  - WIP limits
  - Capacity allocation and balancing
  - Definition of Done
- Note: Different classes of service may have different policies

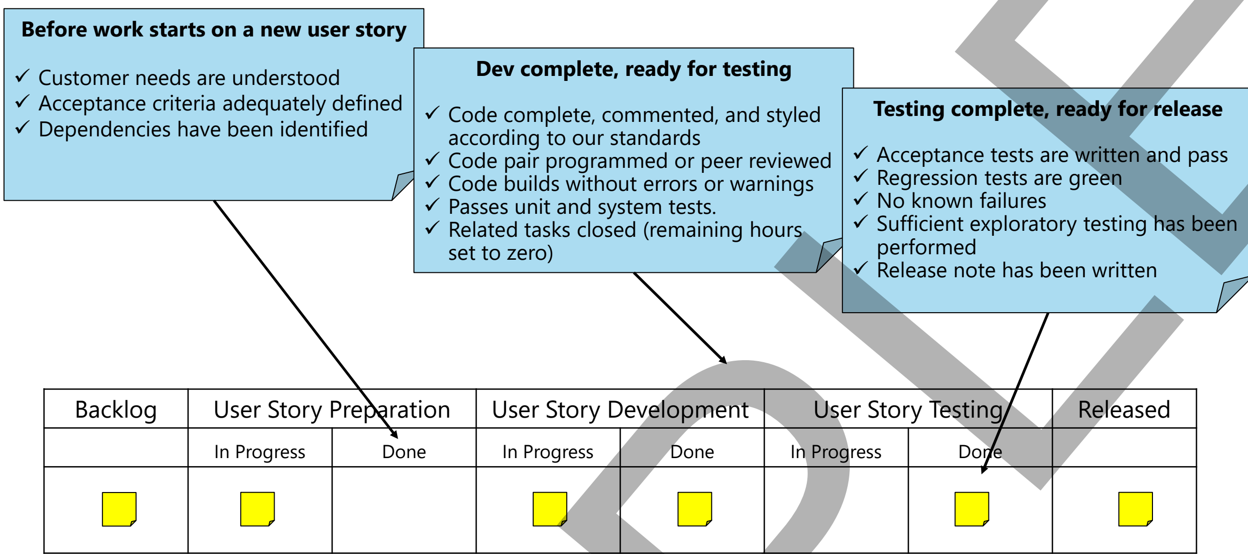
Policies: Examples

- WIP limits
- Capacity allocation and balancing
- Definition of Done
- Replenishment policies (for selecting new work when capacity is available)
- Classes of service (a.k.a. swimlanes)

Definition of Done

- Teams should record the processes and standards they agree to follow and make them readily accessible
  - This is called a definition of Done
- Each WIP column can have its own definition of Done
  - Before a work item is moved from that column, its definition of Done must be met (a.k.a. “pull criteria”)

Definition of Done Examples



Accentient

Configure Definition of Done in Jira

- Jira does not support column-level Definition of Done
  - Vote for this feature here
  - https://jira.atlassian.com/browse/JSWCLOUD-11390
- Workaround:
  - Create a swim lane named "Policies" and add a card in each column that details the column's Definition of Done; the card would not move

Accentient

Classes of Service

- Categories of work items that may warrant different policies for selection and processing based on different criteria
- Four widely-recognized class-of-service types:

Standard	The baseline class of service
Expedite	Very high urgency
Fixed Date	Date-driven, with a potential rapid/steep change in cost of delay
Intangible	Low current urgency but likely to change significantly in the future

Standard Class of Service

- A normal work item that represents a customer ask
  - This could be a Product Backlog Item (PBI) or user story
- This class has no timelines
  - Consider a FIFO (First In, First Out) principle for this class of service

Expedite Class of Service

- The highest priority of work
  - The workflow of this class of service should not be interrupted
  - Examples: Live site incidents, outages, data breaches
- This class of service can break current WIP because it has precedence
- Note: Using an expedite lane generates *flow debt* and lowers predictability

Fixed Date Class of Service

- A normal work item that has a deadline
  - This could be a Product Backlog Item (PBI) or user story that must be completed by a defined date
- These work items can flow in parallel with standard class of service work

Intangible Class of Service

- Useful but negligible (not urgent) work items
  - Examples: Infrastructure upgrades, UI improvements, data optimizations, technical debt payoffs
- Intangible class of service items may become urgent
  - Especially if they are ignored for a long period of time (e.g. technical debt, upgrades)

Accentient

What classes of service does your team offer?

5 MIN

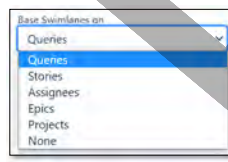
Expedite? Fixed date? Intangible? Other?

About what percentage of work fit into these classes?

Accentient

Configure Swimlanes in Jira

- Add swimlanes to support different classes of service
  - Examples: High priority, Low priority, etc.
- Swimlanes can be based on:
  - Queries, stories, assignees, epics, projects
  - Swimlanes can also be set to None (disabled)
- Focus can be given to a single swimlane by collapsing the others

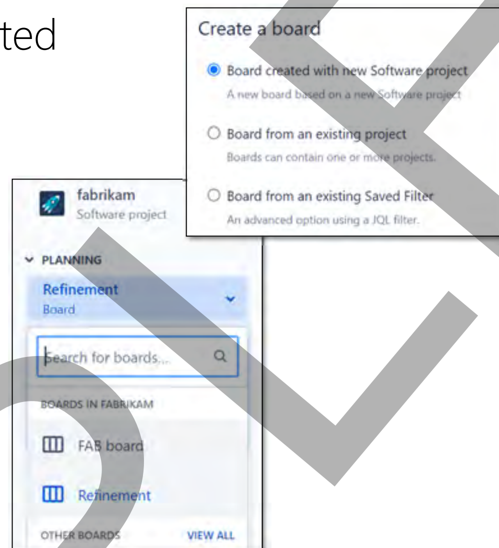


- Note: Cards cannot be dragged and dropped between swimlanes
  - The underlying criteria must be changed (e.g. change priority, assignee, etc.)

Additional Boards and Workflows

Creating Additional Boards

- Additional Kanban boards can be created
  - As part of a new project
  - As part of an existing project
  - As part of an existing project, based on saved filter
- Boards can be created with sample data
  - These will be created in a new project



Accentient

Jira Workflows

- A Jira workflow is composed of a set of statuses and transitions that an issue moves through during its lifecycle
  - It represents the typical work process for your team
  - Jira provides a default *Software Simplified Workflow*
  - You can copy/edit this workflow, select a different one, create a new one from scratch, upload one from a file, or download one from the Atlassian Marketplace
- You can use the *workflow designer* to view a workflow's layout, as well as create and edit its statuses and transitions
  - The workflow of an active project can be changed as well

Visit https://bit.ly/3qxXHdo for more information

Accentient

Module Retrospective

What have we learned in this module?

- A Kanban board is a tool to visualize a workflow
  - Ideally the workflow allows multiple people/teams to collaborate
- Have a clear flow of work before configuring the board
- Make workflow and policies transparent to enable the team to tune their process using experiments
  - Definition of Done, Different levels of service

Lab

45 Minutes

In this lab you will use Jira's Kanban board to define and visualize a workflow.

- Review the default Kanban board
- Customize the Kanban board
- Enable the Kanban backlog
- Configure additional swimlanes
- Create a new Kanban board (optional)
- Create a new Jira workflow (optional)

Lab 2: Visualizing the Workflow

Practicing Kanban Using Jira

LAB OVERVIEW

In this lab your team will use define and visualize your workflow using Jira.

Estimated time to complete this lab: **45 minutes**

Task Execution

As this is a team-based training course, there are a number of opportunities for team members to learn to collaborate more effectively. Unfortunately, there is a possibility for team members to accidentally impede, block, or otherwise cause unintentional conflicts. To minimize the possibility of conflicts, critical tasks in this course have been marked with an icon indicating who on the team should execute the task:

- The team can self-organize and execute the task however they decide
- Only the “leader” should execute this task
- Only the “followers” (not the leader) should execute this task
- Everyone on the team should execute this task
- Everyone on the team should execute this task (working in pairs)

Tip: Look for the “leader” tasks and ensure that they are only performed once per team. Also, ensure that the “follower” tasks are only performed by everyone else (not the leader).

Teams of One

If you are working by yourself and not on a team, make sure to perform all of the “leader” tasks, and none of the “follower” tasks. This scenario is common for students learning remotely.

EXERCISE 1 – USE THE KANBAN BOARD

Task: Review the Default Kanban Board or

In this task each team member, or pair of team members, will review the default Kanban board.

1. In the **fabrikam** software project, go to the **Kanban board**.

   This takes you to the two-dimensional board of cards (issues), which a team can use to view and update work status, especially when practicing Kanban.

   What are the current *columns*? ____

   ____

2. Review the items in the **BACKLOG** column.

   How many items are in the *BACKLOG* column? ____

   This column typically represents items that have arrived in the backlog, but are not yet “ready” for the team to start work on.

3. From the **…** menu in the upper left, select **Hide menus**.

   This doesn’t hide any menu, but does provide a bit more real estate for the board. This is an individual setting, so each team member can have their own preference.

4. Review all of the issues in the **BACKLOG** column.

   How many issues display the *FIND STUFF* label? ____

   These are the stories associated with the *Find stuff* epic. The epic itself has that label as well.

5. From the same **…** menu in the upper left, select **Hide epic labels**.

   This will simplify the board, especially if you don’t care about seeing the hierarchy here. This is an individual setting, so each team member can have their own preference. Feel free to toggle it back on if you’d like.

6. Select any card.

   Did the card's detail view open to the right or did it open in its own dialog? ____________________

7. Close the detail view.

8. From the same **…** menu, select **Open issues in sidebar** or **Open issues in dialog** accordingly.

   You can toggle the experience back and forth.

   Which experience do you prefer? ____

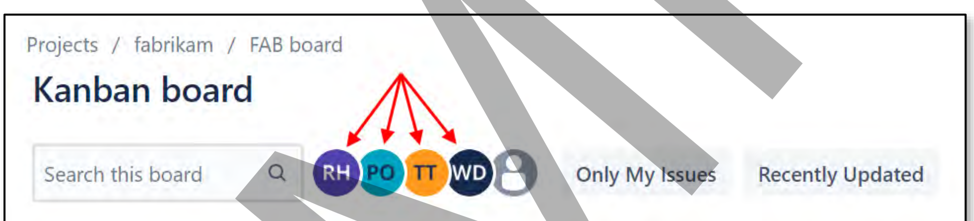
9. Select any unassigned card and, in the detail view, click **Assign to me**.

10. Close the detail view.

    Do you see your initials on that card? ____

11. Toggle the **Only My issues**.

    Alternatively, you can click a team member avatar at the top of the board to filter on that person.



12. In the **Search this board** field at the top, type the keyword **customer**.

    How many cards (issues) are displayed now? ____

    What is the issue key? (e.g. FAB-7) ____

13. In the Search field, type the issue key you just wrote down.

    This is a quick way to jump right to a specific issue.

14. Clear the Search field.

Task: Assign Remaining Issues to Team Members

In this task your team will collaborate and make sure that an equal number of cards (issues) are assigned to each team member.

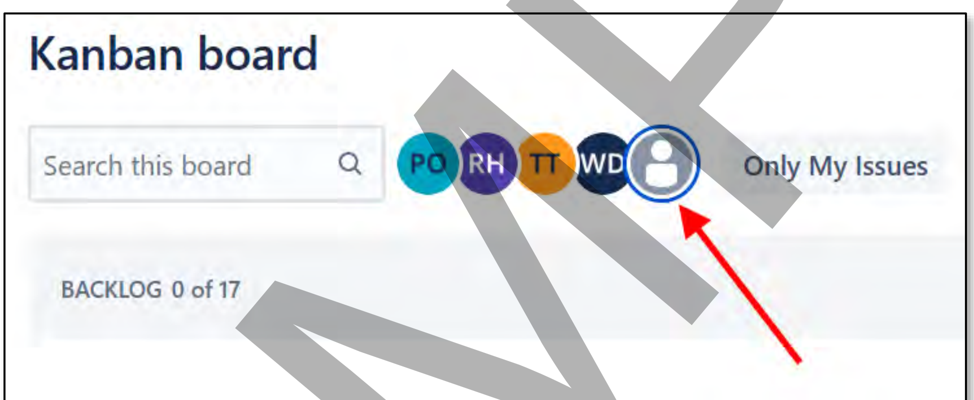
1. Ensure that each team member is viewing all work items.
2. As a team, split the issues as evenly as possible between the team members.

   How many issues does each team member get? ________________________________

3. Click on one of *your* issues and, in the Details view, click **Assign to me**, and close the detail view.

   You should now see your avatar on that issue.

4. Repeat the above steps until you've assigned all of *your* cards to yourself.
5. You can verify that all issues have been assigned by clicking the Unassigned avatar at the top.



Task: Style the Cards

In this task one team member will tweak the card styles, while others will periodically experience them.

Note: Kanban board customizations, such as the ones in this task, are a *team-based setting*, not an individual setting. In other words, only one person on the team needs to make these changes, and everyone else will experience them.

Who will be performing this task? ____

1. From the **…** menu in the upper left, select **Board settings**.

2. Select **Card colors**.

   By default, cards are colored based on issue type. You should see colors for Epic, Bug, and Story.

3. Select the **Colors based on** dropdown to see the various options.

4. Change to **Assignees** and have everyone refresh their Kanban boards.

   Cards are now colored based on who they are assigned to. Colors can be changed as needed.

5. Change to **Priorities** and have everyone refresh their Kanban boards.

   Cards are now colored based on their priority: high, medium, low, lowest.

6. Change to **Queries** and set the following:

   - Color: **Blue**
   - JQL: **text ~ customer**

   Note: JQL stands for Jira Query Language and is a programmatic way to search for your issues in Jira. In this example, we are looking for the word customer (case insensitive) in any text field. Visit https://bit.ly/42sHF1V for more information on search text fields like this.

7. Have everyone refresh their Kanban boards.

   Cards are now colored for those that mention the keyword *customer*.

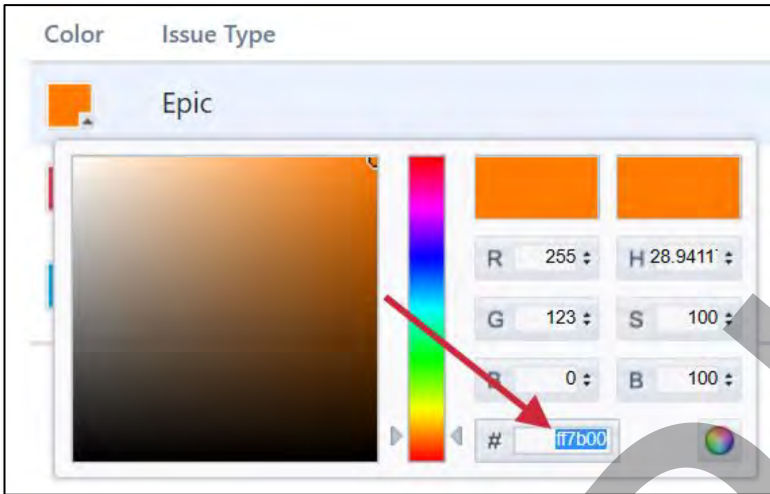
8. Change back to **Issue Types**.

9. Click the color swatch next to **Epic**.

   What is the hex color code (# at the bottom)? ____

   Not an awesome color. Let's pick something better.

10. Enter the Hex value of **FF7B00**, which is a nice orange color.



11. Change Bug's color to **CC293D**, which is a nice red color.

12. Change Story's color to **009CCC**, which is a nice light blue color.

13. Have everyone refresh their Kanban boards.

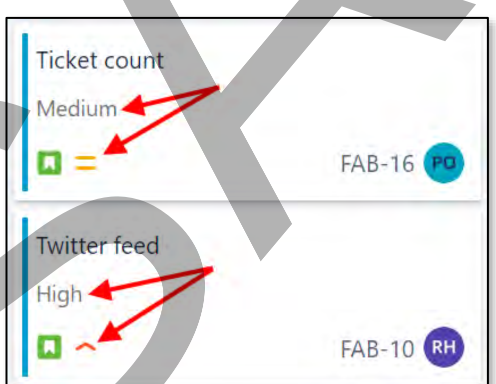
    Cards are now colored for those that mention the keyword *customer*.

14. Select **Card layout**.

    Cards can be configured to show up to three extra fields.

15. In the **Field Name** dropdown, select **Priority**, click **Add**, and have everyone refresh their boards.

    Cards now display the priority of highest, high, medium, low, or lowest. Also, you don't need to display priority because cards already show priority icons:



16. In the **Field Name** dropdown, select **Description**, click **Add**, and have everyone refresh their boards.

    Cards now display the description, although it may be truncated on the cards.

    Is it helpful to show description like this, or does it make the cards too busy? ____________________

    Feel free to experiment by adding/removing fields to the cards.

17. Ensure that the **Days in column** is selected on the Card layout page.

    When enabled, the number of the days that an issue has been in a column are represented by a series of dots on the card itself. This helps you see issues that are stagnating which is particularly useful when your board is displayed as a wallboard.

    You can see this by counting (or hovering over) the small icon(s) in the lower left of a card.

    This indicator is disabled by default for Scrum boards and enabled by default for Kanban boards.

18. Have your colleagues try hovering over the indicator dot on their cards.

    Unfortunately, given the nature of this being a short class, they probably won't see anything besides "1 day in this column".

Task: Add a Quick Filter

In this task one team member will create another quick filter that can be used by everyone on the Kanban board.

Who will be performing this task? ____

1. From the **…** menu in the upper left of the Kanban board, select **Board settings**.

2. Select **Quick Filters**.

   What are the default filters? ____

3. Specify the following and click **Add** to add another quick filter.

   - Name: **High Priority**
   - JQL: **priority = high**
   - Description: **Displays High priority issues**

4. Have everyone refresh their Kanban boards and click the **High Priority** filter at the top.

   The Kanban board will now only show High priority issues.

   How many High priority issues are displayed? ____

EXERCISE 2 – CUSTOMIZE THE KANBAN BOARD

Task: Rename a Kanban Board Column

In this task one team member will rename a Kanban board column and display the Status field on the cards.

Note: Kanban board customizations, such as the ones in this task, are a *team-based setting*, not an individual setting. In other words, only one person on the team needs to make these changes, and everyone else will experience them.

Who will be performing this task? ____

1. If necessary, navigate to the **Kanban board**.

   What is the name of the *leftmost* column? *Rightmost*? ______________________________

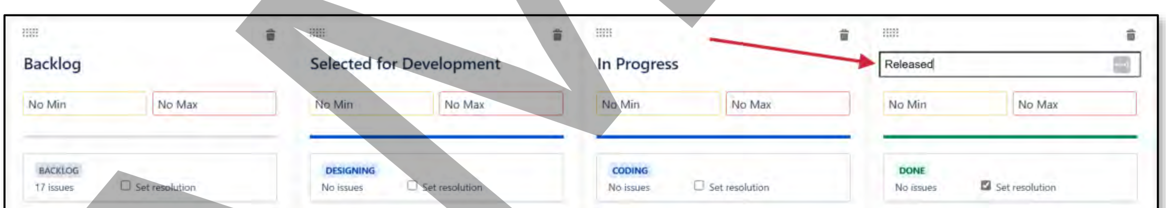
   By default the Kanban board will contain one column for each workflow state. The actual columns vary based on the project type and template selected.

2. Expand all the columns if necessary.

3. From the **…** menu in the upper left, select **Board settings**.

4. Select **Columns**.

5. Rename the **Done** column to **Released**.

   On our team, we're not done with our work until it's been released to production!

   Did this rename the underlying status of Done to Released? __________________________

   We're fine leaving with the Released column mapping to the Done status.

6. Select **Card layout**, **Delete** any extra fields that were created, and then **Add** the **Status** field.

Task: Explore the Column and Status Mappings

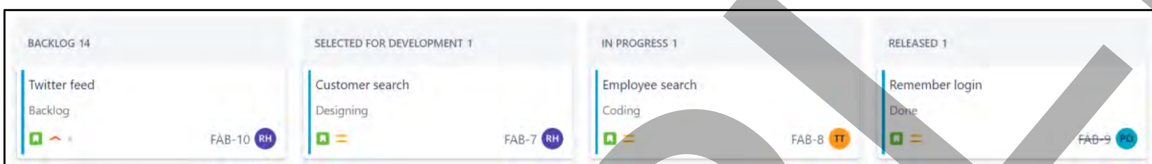
In this task your team will collaborate to explore the columns and status mapping relationships.

1. If necessary, navigate to the **Kanban board** and refresh the page.

   You should see the new column name for the rightmost column.

2. Have someone on the team drag an issue to the **SELECTED FOR DEVELOPMENT** column, drag another issue to the **IN PROGRESS** column, and drag yet another issue to the **RELEASED** column.

   You should now have at least one issue per column and associated status, like in this example:

   What is the *Status* of cards in the BACKLOG column? ____

   What is the *Status* of cards in the SELECTED FOR DEVELOPMENT column? ______________________

   What is the *Status* of cards in the IN PROGRESS column? _____________________________________

   What is the *Status* of cards in the RELEASED column? ____

3. From the **…** menu in the upper left, select **Board settings**.

4. Select **Columns**.

   Here you can see and manage the board columns and other behavior. Your team will be customizing these columns in an upcoming task.

5. Return to the **Kanban board**.

6. Drag all issues back to the **BACKLOG** column.

Task: Explore Reordering Options

In this task one team member will change the way issues on the Kanban board are ordered.

<u>Note</u>: Kanban board customizations, such as the ones in this task, are a *team-based setting*, not an individual setting. In other words, only one person on the team needs to make these changes, and everyone else will experience them.

Who will be performing this task? ____

1. If necessary, navigate to the **Kanban board**.
2. From the **…** menu in the upper left, select **Board settings**.
3. On the **General** page click **Edit Filter Query**.
4. If necessary, click **Switch to JQL** at the top.
5. Change the JQL statement from this:

   ```
   project = FAB ORDER BY Rank ASC
   ```

   to this:

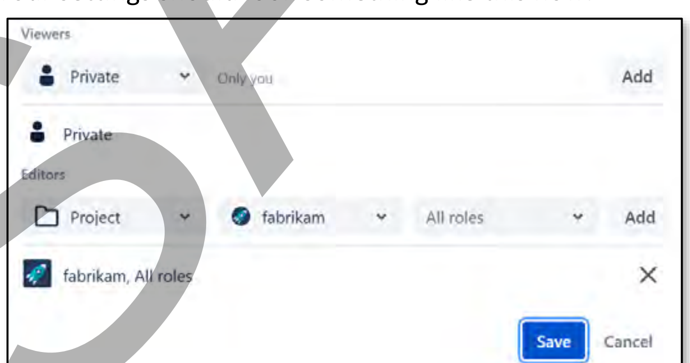
   ```
   project = FAB ORDER BY Summary ASC
   ```

6. Click **Search** to test the query.
7. Click **Details** at the top.

   By default, a new filter is only visible and editable by you.

8. Click **Edit permissions**.
9. Change **Viewers** from Private to **Project**, select the **fabrikam** project, and click **Add**.
10. Change **Editors** from Private to **Project**, select the **fabrikam** project, click **Add**, and then click **Save**.

    Your settings should look something like this now:



11. Click **Save as** at the top, specify a Filter Name of **FAB Issues by Summary** and click **Submit**.

12. Return to the **General** page of **Board settings**.

13. Set the Saved Filter **FAB Issues by Summary**.

14. Have your team members refresh their Kanban boards and inspect the new sorting order.

    Tip: Sorting a backlog alphabetically is not a great idea. Sorting by Priority is better and sorting by Stack Rank (so your team has absolute control) is preferred.

15. Return to the **General** page of **Board settings**.

16. Set the Saved Filter back to **Filter for FAB board**.

17. Have your team members refresh their Kanban boards and inspect the original sorting order, which is based on stack rank.

    Note: Unfortunately, there is no way to see that actual stack rank value on the card or as a field.

Task: Continue Customizing the Kanban Board

In this task one team member will rename the remaining columns and create additional ones.

Who will be performing this task? ____

1. If necessary, navigate to the **Kanban board**.

2. From the **…** menu in the upper left, select **Board settings**.

3. Select **Columns**.

4. Click **Add column** on the right side.

5. Name the column **Refine**, ensure that it is in the **In Progress** category, and click **Add**.

6. Drag the new **Refine** column to the right of **Backlog**.

   What will be the *Status* of cards in the new Refine column? ______________________

7. Delete the **Selected for Development** column.

8. Add a new column named **Develop**, ensure that it is in the **In Progress** category, and drag it to the right of **Refine** if necessary.

   What will be the *Status* of cards in the new Develop column? ________________________________

9. Delete the **In Progress** column.

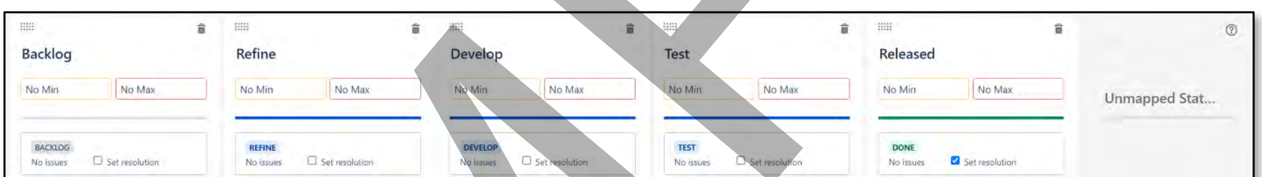
10. Add a new column named **Test**, ensure that it is in the **In Progress** category, and drag it to the right of **Develop** if necessary.

    You should now have five columns: *Backlog*, *Refine*, *Develop*, *Test*, and *Released*, with each mapped to a corresponding status, except for the Released column, which maps to Done.

11. Make sure that only the **Released** column has **Set resolution** checked.

12. Delete any **Unmapped Statuses** on the right.

    The creating and deleting of statuses will also directly affect the underlying workflow, which you will explore in a later exercise. The board columns should now look like this:



13. Have your teammates refresh their browsers and view the new Kanban columns.

EXERCISE 3 – ENABLE THE KANBAN BACKLOG

Task: Add Additional Issues

In this task one team member will import additional issues into the Kanban board.

Who will be performing this task? ____

1. Navigate to the **Kanban board** and refresh the page.

2. If necessary, move all issues back to the leftmost **BACKLOG** column.

   How many issues are listed in the BACKLOG column? ______________________________________

   This is a fairly low number of issues – low enough that they could be managed within the Kanban board. Let's change that.

3. Navigate to your project's **Issues** page.

4. From the **…** link in the upper right, select **Import Issues from CSV**.

5. Click **Choose File**, navigate to **C:\Course\Labs\Lab02**, select **additional.csv**, and click **Next**.

6. Select the **fabrikam** project and click **Next**.

7. Map the **Issue Type**, **Labels**, **Priority**, and **Summary** fields accordingly and then click **Next**.

   This import doesn't include descriptions.

8. Click **Begin Import**.

9. When finished, return to **Kanban board**.

   How many issues are now listed in the BACKLOG column? __________________________________

10. Have everyone refresh their Kanban boards.

    You can start to see the need for a separate way to manage so many backlog items.

Task: Identify the Newly Added Issues

In this task one team member will customize the Kanban board to display the Labels field on the cards.

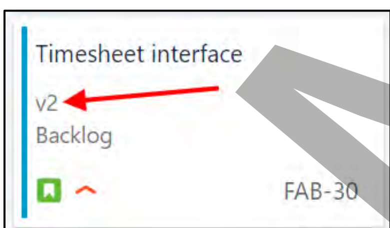
Note: Kanban board customizations, such as the ones in this task, are a *team-based setting*, not an individual setting. In other words, only one person on the team needs to make these changes, and everyone else will experience them.

Who will be performing this task? ____

1. If necessary, navigate to the **Kanban board**.
2. From the **…** menu in the upper left, select **Board settings**.
3. Select **Card layout**.
4. In the **Field Name** dropdown, select **Labels**, and click **Add**.

   You should now be seeing Labels and Status additional fields on the cards.
5. When finished, return to **Kanban board**.
6. Have everyone refresh their Kanban boards.

   You should now see a "v2" label displayed on the newly imported issues.



Task: Enable the Kanban Backlog

In this task one team member will enable the Kanban Backlog for the project.

Who will be performing this task? ____

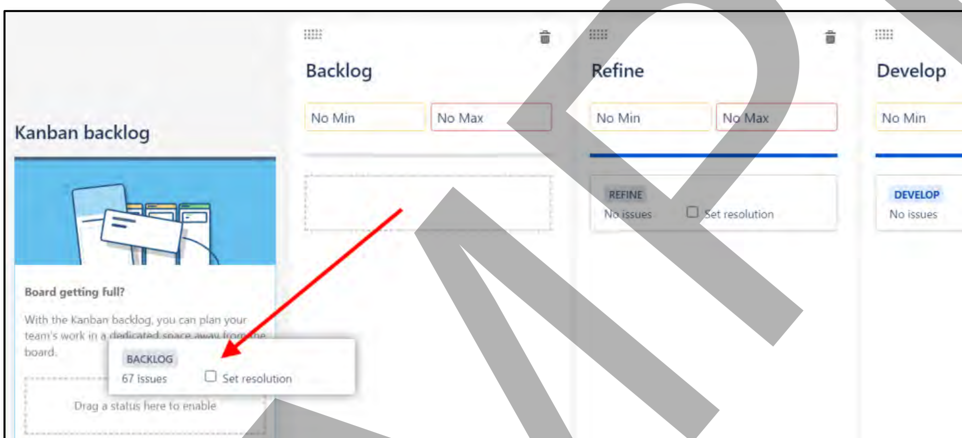
1. If necessary, navigate to the **Kanban board**.

2. From the **…** menu in the upper left, select **Board settings**.

3. Select **Columns**.

   Do you see the Kanban Backlog area to the left of the columns? ______________________

4. Drag the **BACKLOG** status from the Backlog column to the **Kanban backlog** area.



   That's it. There will no longer be a Backlog column on the Kanban Board and, instead, Issues will be managed in the Backlog view.

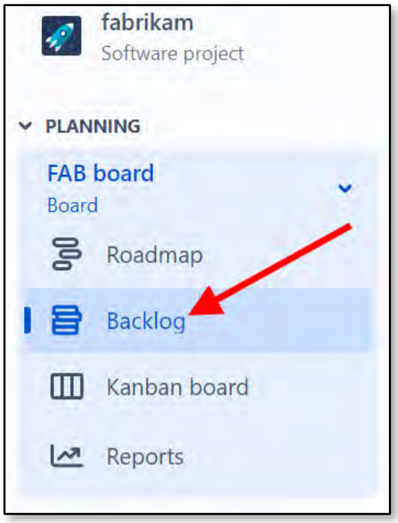
5. Return to the **Kanban board**.

6. Have everyone refresh their Kanban boards.

   Is the *BACKLOG* column gone now? ____

   Do you see a *Backlog* option on the far left now? ________________________________

7. Select **Backlog** on the far left.



You should see all of your Backlog status issues listed here, just as though this were a Scrum project. Your team can use this dedicated backlog to create, prioritize, and select work for development, while the Kanban board has been cleaned up so you can concentrate on your work-in-progress.

How many issues are listed in the Backlog? ____

Do the cards show any Labels (e.g. "v2")? ____

8. From the **...** menu in the upper left, select **Board settings**.

9. Select **Card layout**.

   You should notice a new *Backlog* section.

10. In the **Backlog** section, add the **Labels** field, and then return to **Kanban board**.

11. Have everyone refresh their Kanban boards.

    You should now see a "v2" label displayed on some of the issues.

Task: Refine the Important Issues

In this task your team will collaborate and select a few issues to refine.

1. Ensure that everyone is viewing the **Backlog**.

2. Have each person select 1-2 issues, from anywhere in the backlog, and drag them to the **Refine** section on the top.

   This section represents the next column (Refine) in our workflow after Backlog, which is now the first column on our Kanban board since we enabled the Backlog.

3. Refresh your screen.

   In theory, Jira is supposed to this automatically, but it can take a few moments.

   How many issues are in the *Refine* section at the top? ____

4. Return to the **Kanban board**.

   You should see those same issues here, in the first column.

EXERCISE 4 – IMPLEMENT ADDITIONAL CLASSES OF SERVICE

Task: Add Priority Swimlanes to the Kanban Board

By adding swimlanes to a Kanban board, you can then visualize the work according to different classes of service, such as those issues that need to be expedited and those issues which are low priority.

In this task your team will collaborate and add additional swimlanes to the board based on queries.

1. If necessary, navigate to the **Kanban board**.

2. Have someone on your team open an issue and change its Priority to **Highest**.

3. Have everyone refresh the **Kanban board**.

   What just happened? ____

   By default, Jira adds an *Expedite* swimlane for the *Highest* priority issues.

   Are you able to drag the *Expedite* card back to the *Everything Else* board? ____________________

   Jira doesn't support dragging and dropping cards between swimlanes. Instead, you have to change the underlying criteria that the swimlane looks at.

4. Have someone on your team open a separate issue and change its Priority to **Lowest**.

5. Have everyone refresh the **Kanban board**.

   Did a "Low priority" swimlane appear with that card on it? _________________________________

   By default, this is not a configured swimlane. Let's change that.

6. Have someone on the team go to **Board settings**, select **Swimlanes**, and add another query-based swimlane:

   - Name: **Low priority**
   - JQL: **priority = Lowest**
   - Description: **All issues with the lowest priority**

7. Have that same person and add another query-based swimlane:

   - Name: **Standard priority**
   - JQL: **priority in (High, Medium, Low)**
   - Description: **All standard priority issues**

8. Have the same person drag and drop the swimlanes into this order:

9. Have everyone refresh the **Kanban board**.

   Are you able to drag and drop an issue to a different swimlane? ______________________________

   Jira doesn't support this. You will have to edit an issue, changing its priority in order for it to change swimlanes. It would be nice if the drag and drop would change the priority for you!

Task: Base Swimlanes on Stories

Swimlanes can be configured by story with one parent issue per swimlane (i.e. each swimlane contains all of the parent's sub-tasks), with issues that have no sub-tasks appearing below.

In this task your team will collaborate and configure swimlanes to be based on Stories.

1. Have someone on the team go to **Board settings**, select **Swimlanes**, and change the Base Swimlanes on to **Stories**.

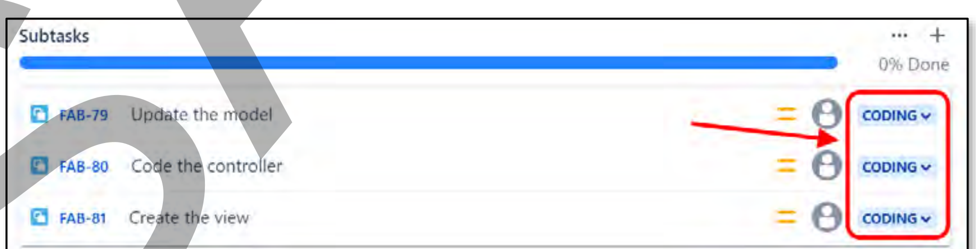
2. Have everyone refresh the **Kanban board**.

   Initially there may not be any swimlanes.

3. Have someone open a *Story* issue and add three subtasks in the **Coding** status.

   - **Update the model**
   - **Code the controller**
   - **Create the view**

   Note: Make sure that each subtask is in the *Coding* status, like this example:



4. Have everyone refresh the **Kanban board**.

   What just happened? ____

   Do you still see the Story card? ______________________________________

   When basing swimlanes on Stories, those stories with subtasks will have their own swimlane, and you can move the subtask cards through the workflow. There won't be a story card anymore.

5. Drag all subtask cards into the **REFINE** column.

6. If possible, have someone open a *Bug* issue and add a subtask **Write failing unit test**, putting it in the **Coding** status.

   You may have to return to the *Backlog* and drag a Bug issue to the *Refine* section.

   Did the Bug issue disappear and become its own swimlane? ________________________

   Note: Even though the Board is configured to base swimlanes on Stories, it works with bugs and tasks as well.

Task: Base Swimlanes on Assignees

Swimlanes can be configured by assignee, so that each team member has their own swimlane, with unassigned issues appearing either above or below the swimlanes.

In this task your team will collaborate and configure swimlanes to be based on assignee.

1. Have someone on the team go to **Board settings**, select **Swimlanes**, and change the Base Swimlanes on to **Assignees**.

   Where will unassigned issues be displayed? ________________________________

2. Have everyone refresh the **Kanban board**.

   How many team members have their own swimlane? ___________________________

   How many issues are in the *Unassigned* swimlane? ___________________________

3. Expand the **Unassigned** swimlane.

   All of the subtasks created in the previous task will be displayed in the Unassigned swimlane.

4. If necessary, drag all of the Unassigned issues to the **REFINE** column.

5. Split up the unassigned issues amongst your team members and have the each take ownership of their issues.

Task: Base Swimlanes on Epics

Swimlanes can be configured by epic, so that each epic has its own swimlane. Issues that don't belong to an epic are grouped below the swimlanes. Any epics that aren't part of the board's current filter are hidden from the board.

In this task your team will collaborate and configure swimlanes to be based on epics.

1. Have someone on the team go to **Board settings**, select **Swimlanes**, and change the Base Swimlanes on to **Epics**.

2. Have everyone refresh the **Kanban board**.

   Do you see the *Find stuff* epic swimlane? How many issues are contained? ____________________

   How many issues are in the *Issues without epics* swimlane? ________________________________

3. Click the **High Priority** filter at the top.

   Do you still see the *Find stuff* epic swimlane? ____

   Note: Any epics that aren't part of the board's current filter are hidden from the board.

4. Click the **Only My Issues** filter at the top.

   Do you still see the *Find stuff* epic swimlane? ____

   Note: Any epics that aren't part of the board's current filter are hidden from the board.

5. Have someone on the team go to **Board settings**, select **Swimlanes**, and change the Base Swimlanes on back to **Queries**.

6. Have everyone refresh the **Kanban board** and clear all filters.