

Experiment-1: Get started with Jira

Aim: Get started with Jira

Software Required: Jira Software

Procedure:

Create a project and choose framework
Kanban

- open Atlassian.com and click on my account and create a login
- After logging in, click on "All services" and select "JIRA software".
- create an email in JIRA software and provide a unique site name
- Select the project template according to your requirements
- Select the project type between "Team-managed" and "company-managed".
- Enter the name of your project and thus a key name is provided.

Set up a Kanban Board:

- Kanban Board in JIRA helps teams visualize their workflow, limit work in progress and maximize efficiency.
- On the left side of your JIRA software an icon named board appears, click it.

→ Create 5 different columns with works associated to it

- To DO
- IN PROGRESS | DEVELOPMENT
- DONE
- PEER REVIEW
- TEST

Create Issues :

→ Under the To DO column, you can create issues

→ Let's consider an example: "A software developer needs to deploy mobile phone's functionality".

→ The issues are :

- Call History
- Contacts (Add)
- Contacts (Read)
- Speed Dial
- Add Favourites.

→ You can also manage issues by assigning specific roles, data, time etc

→ we can see the notifications in the corresponding columns when we shift an issue from one column to another.

Setting WIP limits :

- This phase basically limits to the columns to allow issues
- Ex: If developer column WIP limit is 2 and we add 3 issues, a bright notification appears on the screen to transfer the extra issue.

Create Epics :

- An Epic is a large body of work that can be broken down into number of smaller stories.
- Go to Roadmap to create epic.
- Create 3 epics :
 - Phone manager
 - Email Manager
 - Social networking
- Under each epic, create different issues.
- click on an epic and add child issues and link existing issues
- Similarly add for every epic.

Manage workflow and Transition :

- On the right hand side under the board section, click manage workflow
- You can see a plane of visualisation of issue.
- We can create conditions such as, "the issue can be tested only when it displayed".
- Linking them, two stages of process is also possible
- You can see the changes in the Kanban Board

Invite Teammates :

- You can invite teammates using the link and also assign some specific values in order to manage the access
- You can manage the users activity in the directory section.

Result : The basic knowledge and the working of JICA Software was understood.

Experiment 2

Aim : How to create a JIRA Scrum project.

Software used: ATlassian

Procedure :

Create a JIRA account :

- Create a Jira account by providing Email ID and password
- You will receive a verification email to the registered email. Accept the invite link.

Create a Scrum project :

- Click on "I am new to JIRA"
- "My team is new to agile methodologies".
- "We spend over time on working on features"
- "We have a tight schedule to work".
- Select "SCRUM" as project template.
- Select "Team-managed" as project type.
- Provide a project name and a unique key is given.

Create user stories :

- A user story is a general explanation of a software features written from the perspective of an end user.
- Go to the backlog option on the left side of the page.

- Ex: "Create a website (or) an app for an airline".
- Issues: "As a traveller, I want to the application, so I can see my upcoming flights and print boarding pass".
- select the task option to fulfill the user story
- Tasks:
 - Design account creation interface
 - Implement single sign ON
 - Design upcoming flights interface
 - Connect the flight database
 - Connect the boarding passes database.

Plan with sprints and Backlog:

- There would be a sprint meeting of 2 hours per week to discuss on the project
- Transfer the user story and 2 link issues to the sprint. This indicates the work to be discussed in the 2 hour meeting.
- Now create another, SPRINT 2 and link 3 issues.
- we can link issue in sprint 2 to user story in sprint 1 by clicking on issues, link issue, relates to US1
- Add date and provide 2 weeks duration
- provide story point estimates as 2, 3 in sprint 1. This indicates value towards user story.

Manage Sprints with a Board :

- Transfer the story and issues from one column to another to check the progress.
- Once the user story reaches done column, the Sprint will be done.

Create a Burndown chart :

- click Dashboard and create a new dashboard
- Add a burndown gadget and save.
- Go to Backlog, start sprint and as sprint becomes active, go to dashboard and see the chart
- The Burndown chart has "Guideline", "Remaining values", "non-working days".

Result : Creating a JIRA Scrum project was done successfully.

Experiment - 2

Aim: Create User stories in JIRA.

Software Used: ATlassian

Procedure:

Create Issue:

- Issues are used to track individual pieces of work that must be completed
- Depending on how the team uses JIRA, an issue could represent a project task, a helpdesk ticket etc.
- Create a project named "School Management System."
- Click the "+" icon on the top of the page.
- chose issue type "bug".
- write the Summary. "user is unable to log in to the system".
- Provide a good description.
 - Enter valid login credentials
 - clicked on the login button.
- Expected result would be, "login successful and redirected to the dashboard".
- Actual result "Error message displayed and is not directed to the dashboard".
- Reporter name should be the user
- click on create and issue will be created.
- In order to see the issue created, click on Backlog.
- Create another issue and the type "task" and it states, "Developer starts developing backend and designing front end."

- "Pre-conditions"
user has a registered account in SMS
- "Acceptance criteria"
valid is accepted } credentials
Invalid is not

- Click on create.
- Create another issues as "user-attendance functionality" under the user story type.

Sprint and Epics :

- Create a new sprint with user stories available
- Add the login, register and attendance functionality to the sprint and start the sprint.
- Provide with the necessary dates to the sprint
- Create epic user attendance and ~~epic~~ summarize it as responsible for attendance process.
- click on more fields, epic link, user attendance.
- Once you go back, you can check there is a label added to it.

Result : User stories in JIRA are successfully created

User stories:

→ It is the general explanation of a software feature written from the perspective of an end user.

→ Ex: As a <role>

I want <goal>

so that <benefit>

→ Consider School Management system

• As a teacher,

I want to have a login functionality etc.

→ To write user defined acceptance criteria, there are a few questions to ask:

• Given - precondition

• when - Action

• Then - response.

User Stories in JIRA:

→ Create a project named "School Management system".

→ In the issue type, select "user story".

→ Write the summary as "user login functionality".

→ In description, write:

• "user story"

As a teacher,

I want to have a login functionality
so that I can login successfully.

• "scope"

Have a login page

Credentials validation

User can reset password

Experiment-4

Aim : How to use Roadmaps in JIRA.

Software used : ATLASSIAN

Procedure :

Create Epics and issues on the roadmap :

→ Go to the roadmap and create 3 epics

- Epics :
- User research
 - User Interface design
 - User Interface development

→ Under each of these epics, create different issues

→ Under user research :

- surveys

- Lab Analysis
- Feedback collection.

→ Under user Interface design :

- Feature requirements
- wireframe production
- Mockups production

→ Under user Interface development :

- Functional mock
- UI coding
- Testing.

Plan Timeline with colors and labels :

→ Select the epic and the preferred month. Drag it until the desired deadline

→ Provide an epic with different color icons

→ You can also link issues using various labels.

Track Status and Apply views:

- Click on an issue for ex-surveys and change the status from "to-do" to "done", if it is done already.
- You can also see a green icon stating done right next to the issue
- If all the issues in the epic are done, it shows a green line under the respective epic
- Even though all the issues are done, only when epic itself is done, then the status change.

Manage Dependancies:

- In this phase, you can link epics of different phases
- Click on "user research", "Linked issues" - > > > user Interface design.
- This setup a relationship between the two epics
- Similarly perform for all the remaining ones.

Export the roadmap to PNG/Confluence:

- Click on quarterly cycle and click export
 - click the start date and End date and click export.
 - It will save a (.png) file.
 - Click on project pages and connect to confluence.
 - call the confluence name as "Product Development".
 - Set up a blank page and name it "roadmap".
 - select the JIRA roadmap and add it to the page.
 - Paste the JIRA URL, select projects and boards
 - This will open the roadmap that belong to current project
 - The project page as will be saved on confluence page
- Result: How to use roadmaps in JIRA was understood successfully.

Experiment - 5

Aim: Automate tasks and processes with JIRA.

Software used: ATlassian

Procedure:

Create an auto assigner rule from library:

- Create a project under kanban template and go to project settings and click on automation.
- Now Add issues for example say, "create a webinar".
- we can now proceed again to project settings, automation and select from the templates available for the purpose of automation.
- Select "SMART AUTO-ASSIGN" as the template for your project.

→ Template

When Issue is Created



Assignee is Empty (condition)



Action (Assign issue)

- Call the process "Auto assign" as turn it on.

Create a Sub Tasks Template rule:

- Go to project settings, automation, create rules.
- when: Issue is created, then: new action (create sub tasks)

- Add 3 to 5 subtasks such as:
 - Script creation
 - Script review
 - Create slides.

Use Smart values:

- click on an issue and if you want to link two issues click on link issue, blocks, the other issue.
- we will have a dependency now
- The owner should get a warning when they are linked
- Issue Linked-Type (Blocks)

Then: Action (Send Email)

- The Email is sent to assignee, subject "Issue {{ issue.key }} has just been linked to another."
- we can write the content as, "please review the project dependency documentation and make sure that relevant steps are in place to address the dependency."
- Click on save and name it as Communications on blocking issue and then turn it on.

Result: Automating Tasks and processes with JIRA was understood successfully.

- Name it as Subtasks creation and "turn it on".
- Now if you create a new issue such as "Create feature & webinar", you can see subtasks linking to it automatically.

Add Condition to Subtasks Creation:

- when: Issue created
 - ↓
 - New condition (if/else block)
 - ↓
 - if (issuefield - summary - value (webinar) click save)
 - ↓
 - Add component (Create sub tasks).

- If the condition doesn't satisfy then,
- select else: other set → then new actions.
- Now we can customise the rules and the new changes will be reflected on the roadmap.

Auto update status using Branches:

- create rule

- "issue transitioned" - from status to to status (done)
- click save

- when: Issue Transitioned To (done)
 - ↓
 - Issue type equals (sub task)
 - ↓
 - For parent
 - ↓
 - If Subtask-match; status (done)
 - ↓
 - then transition the issue to (done).