ASSIGNMENT-1

Introduction to Version Control and Project Management Tools

(INDIVIDUAL)

Course: EC360 Software Engineering

Submission Format: Single PDF file

Submission Method: Upload on LMS

Course Learning Outcome (CLOs)		PLOs	Learning Level
CLO 1	Apply a software development strategy and select appropriate software development model for any given software project	PLO 11	C3

This assignment is designed to introduce you to two fundamental tools used in professional software development: **GitHub** for version control and **Jira** for project management. You will be individually setting up a project workflow that integrates these two platforms. This is a foundational exercise that will prepare you for future team-based projects in this course.

Learning Outcomes

Upon successful completion of this assignment, you will be able to:

- Use **GitHub** to create and manage a basic code repository.
- Use **Jira** to create and manage a software project.
- Understand the importance of **integrating** version control and project management tools.

Tasks (6):

1. **GitHub Setup**
    - If you don't already have one, create a **GitHub** account. This will be your primary platform for code hosting and collaboration throughout the course.
    - Create a **new, public repository** for this assignment. Name it **EC360-A1-YourStudentID**.
    - Take a **screenshot** of the main page of your newly created GitHub repository, clearly showing the repository name and your username. This serves as **proof of your work**.
2. **Jira Setup**
    - Create a new account on **Jira** (specifically, Jira Software Cloud).
    - Create a new **Scrum project**. Name the project **EC360-A1-YourStudentID-1**.
    - Add at least one **project member** to your Jira project. This can be a classmate, but it should demonstrate your ability to manage team members.

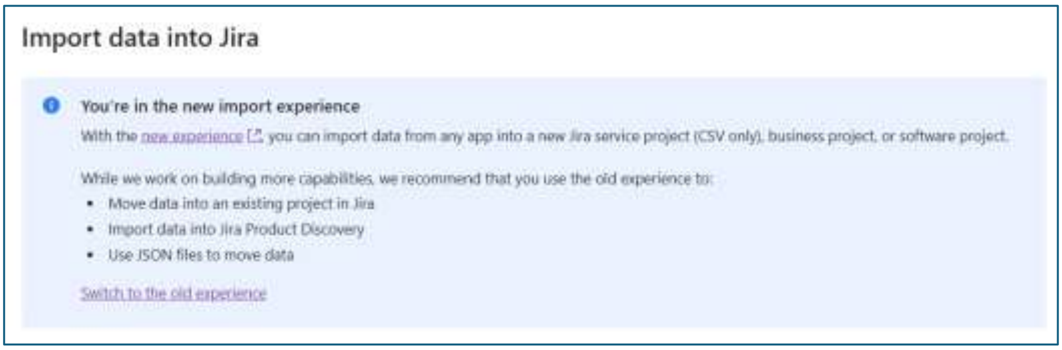
- Take a **screenshot** of your Jira project's **dashboard** or project board, clearly showing the **project name** and the **project members** you have added.

3. **Jira Project Creation**

- Create 2nd blank **Company Managed - Scrum project**. Name the project **EC360-A1-YourStudentID-2**.
- Take a **screenshot** of your Jira project's **dashboard** or project board, clearly showing the **project name** and the **project members** you have added.

4. **Jira Project Import**

- Data is provided with the assignment. See the video for this part: https://youtu.be/CuzPpAxmSt4?si=-ljiKlNBCTpq3JlL.
- Create 3rd blank **Company Managed - Scrum project**. Name the project **EC360-A1-YourStudentID-3**.
- Go to *Jira admin settings > System > External System Import* page. On the page you will see the following view:



Import data into Jira

You're in the new import experience

With the new experience, you can import data from any app into a new Jira service project (CSV only), business project, or software project.

While we work on building more capabilities, we recommend that you use the old experience to:

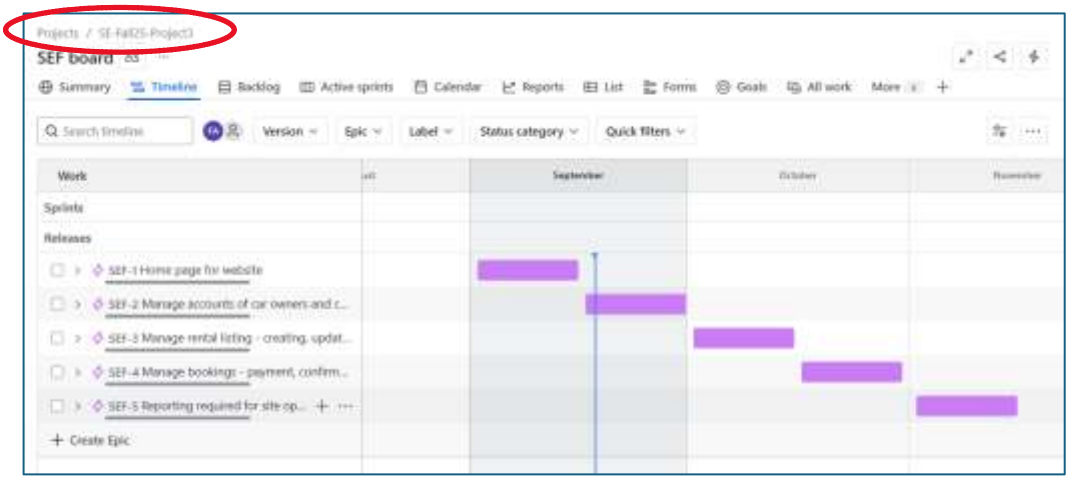
- Move data into an existing project in Jira
- Import data into Jira Product Discovery
- Use JSON files to move data

Switch to the old experience

- Click "Switch to old experience" and then follow instructions to import the data in the 3rd project. Two files to be used which are provided with the assignment: -

    1. AxisAgile-Jira-Sandbox-Data-v1.5.csv
    2. CSV-configuration-202509181703.txt

- Take a **screenshot** of your Jira project's **Timeline** modified as below, clearly showing the **project name** you have added.

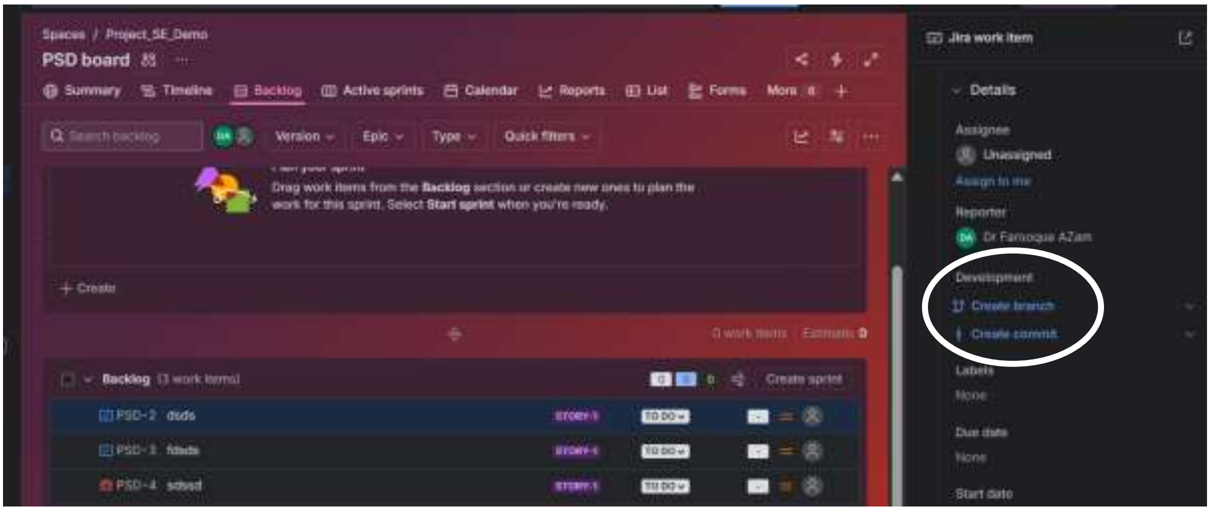

Projects / SE-Fall25-Project3
SEF board
Summary
Timeline
Backlog
Active sprints
Calendar
Reports
List
Forms
Goals
All work
More
Search timeline
Version
Epic
Label
Status category
Quick filters
Work
September
October
November
Sprints
Releases
SEF-1 Home page for website
SEF-2 Manage accounts of car owners and c...
SEF-3 Manage rental listing - creating, updat...
SEF-4 Manage bookings - payment, confirm...
SEF-5 Reporting required for site op...
Create Epic

5. **Linking GitHub and Jira**

    - Integrate your Jira project with your GitHub repository. The goal is to connect your project management tasks to your code changes.
    - Follow the official instructions within Jira to link the two accounts and your specific repository.
    - Take a **screenshot** showing the successful integration between your Jira project and your GitHub repository. This might be a screenshot of the "**Apps**" or "**Integrations**" section within your Jira project settings.

6. **Jira Issue → GitHub Branch and Commit Integration**

This task demonstrates how individual Jira issues are linked with actual development work in GitHub using branches and commits.



Drag work items from the **Backlog** section or create new ones to plan the work for this sprint. Select **Start sprint** when you're ready.

0 work items | Estimate: 0

Backlog (3 work items)

PSD-2 dsds

PSD-3 fdsds

PSD-4 sdssd

Assignee: Unassigned

Reporter: Dr Farooque AZam

Development

Labels: None

Due date: None

Start date

Branch Integration

- From your integrated Jira project, select one Jira issue (***task or story***).
- Use Jira's GitHub integration to create a new GitHub branch directly from the Jira issue.
- Ensure the branch name follows the automatic Jira naming convention and includes the issue key (*e.g., EC360-1-feature-branch*).
- Take a screenshot showing:
    - The Jira issue
    - The option used to create the branch
    - The created branch visible in GitHub

Commit Integration

- Using the branch created above (or any existing branch), make a code change in your GitHub repository.

- Create a commit message that includes the same Jira issue key (e.g., ***EC360-1: Initial project setup***).
- Verify that the commit is automatically linked back to the Jira issue.
- Take a screenshot showing:
  - The commit in GitHub
  - The Jira issue displaying the linked commit

Evidence Required

- Screenshots clearly demonstrating:
  - **Jira issue → GitHub branch creation**
  - **GitHub commit → Jira issue linkage**

Submission

- Compile all the screenshots into a **single PDF file**.
- Ensure each screenshot is clearly visible and labeled with a **brief description** (e.g**.**, **"Screenshot 1: GitHub Repository," "Screenshot 2: Jira Project," "Screenshot 3: Jira-GitHub Integration", etc**).
- The file should be named **StudentID_EC360_A1.pdf** and uploaded to the designated submission portal by the due date.

This assignment is a key step in understanding modern software development workflows. Good luck!