**1. Create the Epic in Jira**

**Epic Name:**

📌 *Merlin Frontend Automation – OpenFin*

**Epic Description:**

*"Develop an automation suite for Merlin’s frontend built on OpenFin technology. The framework should support launching the application, automating login/logout, navigation, UI interactions, screenshot capture, and structured test execution. The automation should be scalable, maintainable, and support execution in a Windows Virtual Machine (VM) environment."*

**2. Breakdown Work Sprint-wise in Jira**

**🔹 Sprint 1 – Initial Setup & Framework Design**

📌 *Goal: Establish the foundation of the automation framework and configure the environment.*

* 📌 **Task 1:** Research & Analyze OpenFin Automation Strategies
  + Investigate automation approaches (Java, Playwright, OpenFin APIs, or alternatives).
  + Explore OpenFin developer tools for automation feasibility.
* 📌 **Task 2:** Set Up Automation Project in IntelliJ IDEA
  + Create a new repository for the automation framework.
  + Configure dependencies (Playwright, Selenium, or OpenFin APIs).
* 📌 **Task 3:** Implement Batch File Execution for App Launch
  + Automate running the batch file to start the Merlin application.
  + Validate correct application launch.
* 📌 **Task 4:** Develop Base Test Structure & Logging
  + Define folder structure (test cases, page objects, utilities).
  + Implement logging mechanism for tracking execution.

**🔹 Sprint 2 – Login & Logout Automation**

📌 *Goal: Automate user authentication and ensure session handling works properly.*

* 📌 **Task 1:** Automate Login Process
  + Locate and interact with login elements in OpenFin.
  + Implement credential input and validation.
* 📌 **Task 2:** Handle Login Errors & Captcha
  + Automate scenarios for incorrect credentials.
  + Implement Captcha handling if applicable.
* 📌 **Task 3:** Automate Logout Functionality
  + Ensure user sessions are properly closed after logout.
  + Validate logout redirection.

**🔹 Sprint 3 – Navigation & Dock Window Interactions**

📌 *Goal: Automate navigation through different screens and validate UI interactions.*

* 📌 **Task 1:** Automate Dock Window Navigation
  + Identify elements for user profile settings.
  + Automate selection and interactions.
* 📌 **Task 2:** Implement Screenshot Capture for Debugging
  + Capture screenshots at key test steps.
  + Store logs and images in a structured format.

**🔹 Sprint 4 – Advanced UI Automation & Integration**

📌 *Goal: Improve automation suite by adding validations, test execution, and reporting.*

* 📌 **Task 1:** Implement Assertions & Validations
  + Validate UI components and test outcomes.
* 📌 **Task 2:** Integrate with CI/CD (Jenkins/GitHub Actions)
  + Automate test execution in Jenkins pipeline.
* 📌 **Task 3:** Performance Testing for UI Components
  + Measure and log application response times.

**3. Link Tasks & Subtasks in Jira**

* **Epic:** Merlin Frontend Automation
* **Story:** Automate Login Process
  + **Task:** Identify login elements
  + **Task:** Automate credential input
  + **Task:** Implement error handling
* **Story:** Automate Dock Navigation
  + **Task:** Identify menu elements
  + **Task:** Automate navigation actions

Would you like a sample **Jira issue template** for better tracking? 😊

4o

**You said:**

yes

**ChatGPT said:**

Here’s a **Jira Issue Template** you can use to track your automation tasks efficiently.

**📌 Epic: Merlin Frontend Automation – OpenFin**

**Epic Summary:** Develop an automation suite for the Merlin frontend built on OpenFin technology, supporting login, logout, navigation, and test execution within a Windows VM environment.

**🔹 Sample Jira Task Template**

**Issue Type:** Task / Story  
**Summary:** [Feature] Automate Login Functionality in OpenFin

**Description:**  
As part of the Merlin Frontend Automation suite, this task involves automating the login functionality, ensuring secure authentication, handling incorrect credentials, and verifying session management.

**Acceptance Criteria:**

✅ OpenFin application launches via batch file.  
✅ Login fields (username, password) are identified and interactable.  
✅ Valid credentials allow successful login.  
✅ Incorrect credentials trigger appropriate error messages.  
✅ Captcha handling (if applicable) is implemented.

**Subtasks:**

1️⃣ **Identify and Inspect Login Elements**  
2️⃣ **Automate Credential Input & Login Submission**  
3️⃣ **Validate Successful Login**  
4️⃣ **Handle Login Errors & Edge Cases**  
5️⃣ **Integrate Logging & Screenshot Capture**

**Priority: High**

**Labels: Automation, OpenFin, Login, Sprint-1**

**Sprint: Sprint 2 – Login & Logout Automation**

**Assignee: [Your Name]**

**Reporter: [Your Name]**

**Linked Issues: (If applicable, link to parent Epic or dependencies)**

**🔹 Sample Jira Bug Template**

**Issue Type:** Bug  
**Summary:** [Bug] Login Automation Fails When Captcha is Triggered

**Description:**  
During automated login testing, the script fails when the Captcha challenge appears, preventing further test execution.

**Steps to Reproduce:**

1. Run the login automation script.
2. Enter incorrect credentials multiple times.
3. Observe that a Captcha challenge appears.

**Expected Result:**

Login automation should detect Captcha and handle it accordingly.

**Actual Result:**

The script fails to proceed after the Captcha is triggered.

**Priority: Medium**

**Labels: Bug, Login, OpenFin**

**Sprint: Sprint 2 – Login & Logout Automation**

Would you like this in **Markdown format** for easy copy-pasting into Jira? 😊

4o

**You said:**

yes. also please provide me this with comprehensive style

**ChatGPT said:**

Here's a **comprehensive Jira Issue Template in Markdown format**, ready to copy and paste into Jira. It includes detailed descriptions, structured subtasks, and formatting for easy readability.

**📌 Epic: Merlin Frontend Automation – OpenFin**

**Epic Summary:**  
Develop an automation suite for the Merlin frontend built on OpenFin technology. The framework should support launching the application via batch files, automating login/logout, navigating UI components, handling screenshots, and executing tests within a Windows Virtual Machine (VM) environment.

**Epic Goals:**

* Design a scalable automation framework for OpenFin-based UI.
* Automate core functionalities like login, logout, and UI interactions.
* Integrate the framework with CI/CD (Jenkins/GitHub Actions).
* Ensure execution reliability in a Virtual Machine environment.

**Labels:** Automation, OpenFin, Merlin, QA  
**Sprint:** Sprint 1 – Initial Setup & Framework Design

**🔹 Sample Jira Task Template (Markdown)**

**🚀 Task: [Feature] Automate Login Functionality in OpenFin**

**Issue Type:** Task / Story  
**Sprint:** Sprint 2 – Login & Logout Automation  
**Priority:** 🔴 High  
**Assignee:** [Your Name]  
**Reporter:** [Your Name]  
**Labels:** Automation, OpenFin, Login, Sprint-2

**📖 Description:**

This task involves automating the login functionality for the Merlin trading application running on OpenFin. The automation should:

* Support launching the application via batch file.
* Identify and interact with login fields.
* Validate successful login and error scenarios.
* Capture screenshots and logs for debugging.

**✅ Acceptance Criteria:**

* OpenFin application launches via batch file.
* Login fields (username, password) are correctly identified.
* Valid credentials allow successful login.
* Incorrect credentials trigger appropriate error messages.
* Captcha handling (if applicable) is implemented.

**🛠️ Subtasks:**

1️⃣ **Identify and Inspect Login Elements**

* Locate and analyze login UI components in OpenFin.
* Use developer tools to extract element attributes.

2️⃣ **Automate Credential Input & Login Submission**

* Implement a Playwright or Selenium-based script.
* Enter credentials and submit login form.

3️⃣ **Validate Successful Login**

* Ensure users land on the dashboard after login.
* Capture logs to verify authentication success.

4️⃣ **Handle Login Errors & Edge Cases**

* Test with invalid credentials.
* Handle Captcha (if applicable).

5️⃣ **Integrate Logging & Screenshot Capture**

* Capture screenshots for failures and validations.
* Store logs systematically for debugging.

**🔹 Sample Jira Bug Template (Markdown)**

**🐞 Bug: [Bug] Login Automation Fails When Captcha is Triggered**

**Issue Type:** Bug  
**Sprint:** Sprint 2 – Login & Logout Automation  
**Priority:** 🟡 Medium  
**Assignee:** [Your Name]  
**Labels:** Bug, Login, OpenFin

**📖 Description:**

During automated login testing, the script fails when the Captcha challenge appears, preventing further execution.

**⚡ Steps to Reproduce:**

1. Run the login automation script.
2. Enter incorrect credentials multiple times.
3. Observe that a Captcha challenge appears.

**🎯 Expected Result:**

Login automation should detect Captcha and handle it accordingly.

**🚨 Actual Result:**

The script fails to proceed after the Captcha is triggered.

**🔍 Debugging Notes:**

* The Captcha challenge appears randomly, making automation difficult.
* Possible solutions include integrating third-party Captcha solvers or adding manual intervention.