**AI-Based QA Automation Tools Evaluation**

### **Objective**

Evaluate AI-powered QA tools by generating test cases for the existing ETL Monitoring Application and determining whether these tools are suitable for integration.

### **Tools Researched**

1. Testim (by Tricentis)
2. Mabl
3. Autify
4. Reflect.run

### **Tool Comparisons**

#### 1. **Testim (by Tricentis)**

* **Setup:** Quick with Chrome extension
* **Test Creation:** Successfully recorded flows for login, navigation, and summary views
* **AI Features:** Smart locators, auto-heals broken tests, supports dynamic content
* **Export:** Compatible with Playwright and Git-based CI
* **Pros:** Powerful, developer-friendly, great long-term option
* **Cons:** Some advanced features locked behind paid tiers

#### 2. **Mabl**

* **Setup:** Requires installation but offers smooth UI
* **Test Creation:** Records flow, handles validation scenarios well
* **AI Features:** Auto-maintains tests, visual regression built-in
* **Pros:** Visual testing and advanced logic support
* **Cons:** Slightly heavier learning curve, limited free tier

#### 3. **Autify**

* **Setup:** Very easy, browser-based
* **Test Creation:** Beginner-friendly UI with scenario-based creation
* **AI Features:** UI change adaptation, natural language test generation
* **Pros:** Clean UI, easy to learn
* **Cons:** No permanent free plan

#### 4. **Reflect.run**

* **Setup:** No code, no installation needed
* **Test Creation:** Easily captures login/register flows and simple dashboards
* **AI Features:** Smart selector handling
* **Pros:** Fastest tool to get started, great for non-dev testers
* **Cons:** Limited logic/scripting support, less flexible than others

### **Hands-on Evaluation with Testim**

* Successfully recorded E2E test flow on ETL Monitoring App
* Covered: Login page, dashboard navigation, summary stats validation, table display check
* AI accurately handled UI elements, dynamic content, and replayed without issues
* Setup was quick, test authoring was intuitive

### **Test Cases Attempted**

* Login with valid and invalid credentials
* Registration with duplicate and new users
* Sync Status and Vitals: Data visibility, Date Filter and pagination checks
* Summary Page: User ingestion stats validation
* Dashboard navigation across views

### **Recommendation**

**Testim** is the most viable AI QA tool for integration: - Reliable test creation - Handles dynamic elements - Easy to use with Playwright/CI-compatible export - Works well with existing frontend.