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"Vibium" The Future of Website Testing - by Jason Huggins

The Big Question: What's the Future?
- If Selenium was the backbone of web automation for the last decade...
- Will Vibium become the new framework that merges reliable testing with AI-driven intelligence?

For Everyone: The Open-Source Promise
- **Free and Open for All**
  - Encourages community collaboration and faster improvement
- **Privacy and Control**
  - Can be run on your own computers ("on-premise") to keep company data secure

Challenges to Overcome (The Hurdles Ahead)
- **AI Costs & Speed**
  - Large Language Models (the "brains" of the AI) can be expensive and slow to run
- **Balancing Flexibility and Reliability**
  - The challenge is to get the benefits of AI's adaptability...
  - ...while still ensuring that tests are reliable and produce consistent, repeatable results (determinism)

A New Way of Thinking: Rethinking the Testing Pyramid
- **What is the Testing Pyramid?**
  - A classic concept that balances different types of software tests
- **How Vibium changes it:**
  - It adds a new layer of fast, AI-assisted checks
  - This allows for answering high-level business questions quickly
  - Example: "Can users still complete a purchase from my online store?"

What is Vibium? (The "Selenium for AI")
- **Who is the creator?**
  - Jason Huggins: A pioneer in software testing
  - Famous for creating industry-standard tools like Selenium & Appium
- **What's the big idea?**
  - Using Artificial Intelligence (AI) to automatically test websites and apps
  - It aims to standardize AI-driven testing, just as Selenium did for web testing

How it Works (Fresh Start, Familiar DNA)
- **An Evolution of Selenium**
  - Built from scratch with modern technology
  - Powered by "WebDriver BiDi" & WebSockets for super-fast, stable communication
- **Why Add AI? (The Flakiness Fix)**
  - The Common Problem: Tests often break when a button moves or its code name changes
  - Vibium's Solution: "Fallback Intelligence"
    - When a test gets stuck, the AI steps in to find a solution
    - Analogy: It's like Google Maps suggesting an alternate route when you hit a roadblock

A Revolutionary Idea... "Model-Based Testing 2.0"
- The Old Way: Writing rigid, step-by-step test instructions manually
- The New Vibium Way: Creating an automatic "map" of the entire application
  - Vibium's AI explores the website and learns its structure automatically
  - Analogy: It's like how Google Street View cars mapped the real world, but for an app

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