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🚀 Using Generative AI for Automated Test Case Generation 👨‍💻🛠️

Generative AI (Artificial Intelligence) and specifically, the LLMs (Large Language Models) have transformed software development, but their potential in testing is just as exciting! Instead of manually crafting test cases, we can leverage LLMs to generate them directly from requirement documents, ensuring development aligns with both functionality and test coverage.

Below is a short snapshot of a (trivial) Proof of Concept (PoC) that automates this process using Langraph, which helps structure LLM-driven workflows. While LLMs can be unpredictable in decision-making, Langraph ensures they follow a predefined, controlled workflow, leveraging AI at the right steps without unnecessary deviations.

Here's how it works:
✅ Load Requirement Document – Uses a provided document or defaults to `content.txt`.
✅ Select LLM – Choose from open-source models (defaults to LLaMA 3).
✅ Pick Test Case Format – Supports Gherkin (BDD) & Selenium (automated web testing).
✅ Generate Test Cases – Outputs structured, verbose test cases, which can be refined into executable scripts.

This approach not only saves time but also ensures comprehensive testing from the start! 🚀 Future enhancements

will focus on making the generated test cases more actionable and directly runnable.

Would love to hear your thoughts—how do you see LLMs shaping the future of software testing? 🤔 💡

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