



Leveraging R and AI: Advancing ADaM Automation for Clinical Data Analysis

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Agenda

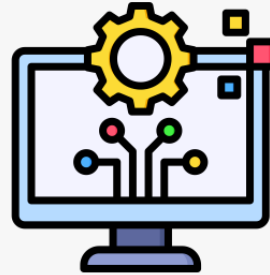
- Where Are We — Current State and Technological Value
- Where To Go — Strategic Goals and Focus Areas
- How To Achieve It — Technical Implementation Path and Business Impact

Core Value of AI-Generated ADaM Using R Code



Boost Efficiency, Shorten Processes

- Accelerate ADaM dataset creation
- Automate repetitive tasks
- Flexibly adapt to evolving study needs



Improve Data Quality, Reduce Human Errors

- Ensure consistency and traceability through automation
- Standardized code structure for easy collaboration and maintenance



A Flexible Alternative to SAS

- Open-source R reduces reliance on costly SAS licenses
- Seamless integration with AI for better performance and scalability

Enhance Competitiveness, Expedite Submissions

- Shorten analysis cycles to fast-track drug approval
- Reallocate resources toward high-value tasks



Vision and Strategic Direction: Empowering Platform Development Through AI

Reduce Resources and Improve Efficiency

- Use AI to optimize resource allocation, save time and effort, and simplify operations.
- Enhance development productivity while delivering higher-quality results.
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Build Smarter and More Automated Processes

Leverage AI to automate code generation and reduce repetitive tasks. Streamline workflows for a faster and more intuitive platform experience.



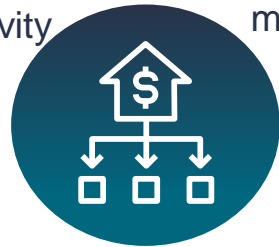
Project Management

Use AI to analyze and adjust plans in real-time, making projects more predictable and agile. Maintain clear communication and collaboration throughout every stage.



Respond Faster and Deliver High-Quality Results

- Apply AI-driven tools to shorten timelines and ensure reliable outcomes.
- Provide intelligent support for stronger product performance



Optimize Testing and Integration

Automate testing with AI to improve code quality and stability. Speed up deployment cycles while minimizing errors.



Enhance Version Control and Management

- Manage versions and dependencies seamlessly.
- Enable efficient collaboration with clear and unified development strategies.



How To Achieve It — Technical Implementation Path and Business Impact

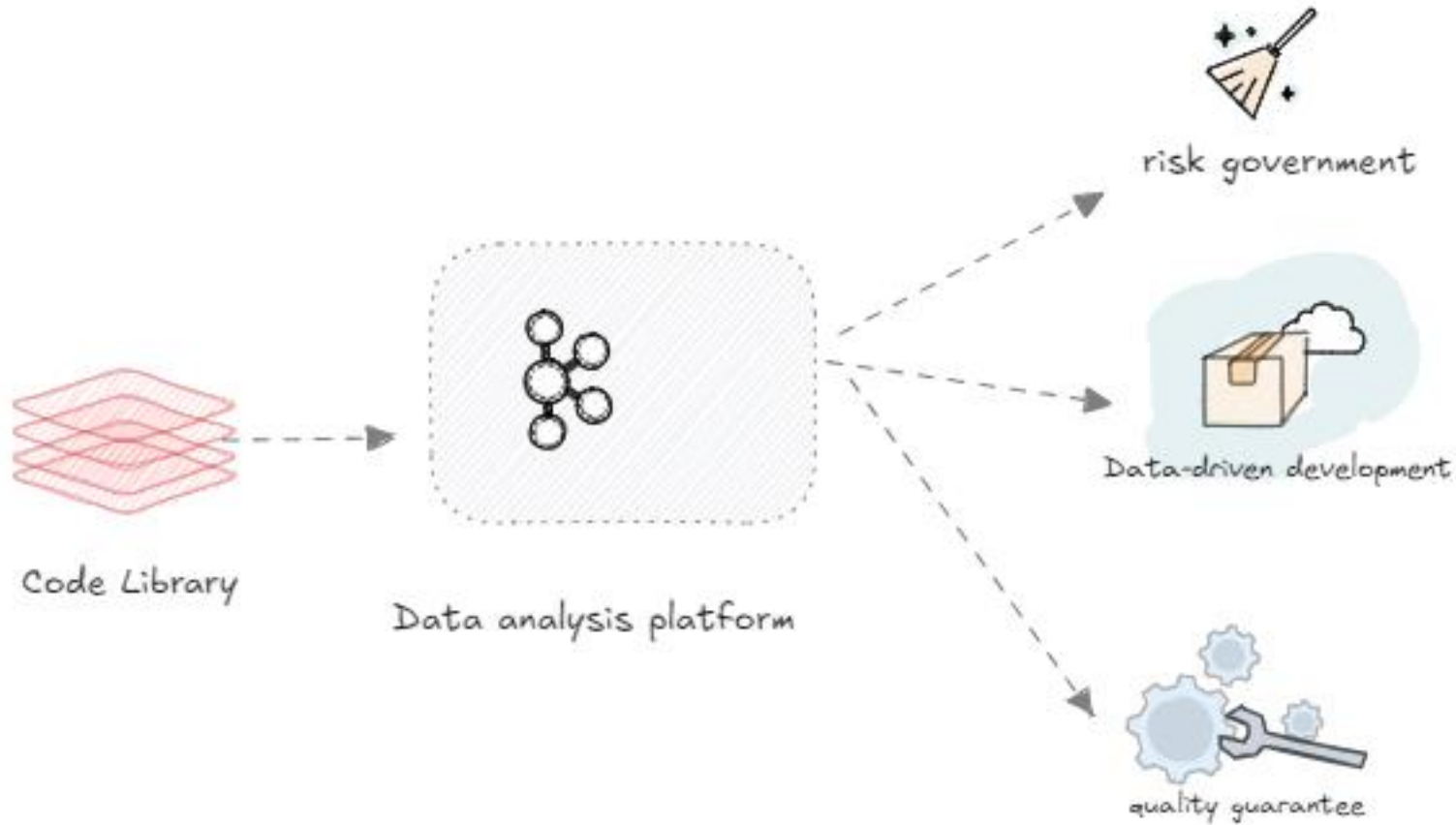
Integrating R Ecosystem for Extended Applications

Leveraging Industry Tools for Enhanced Management

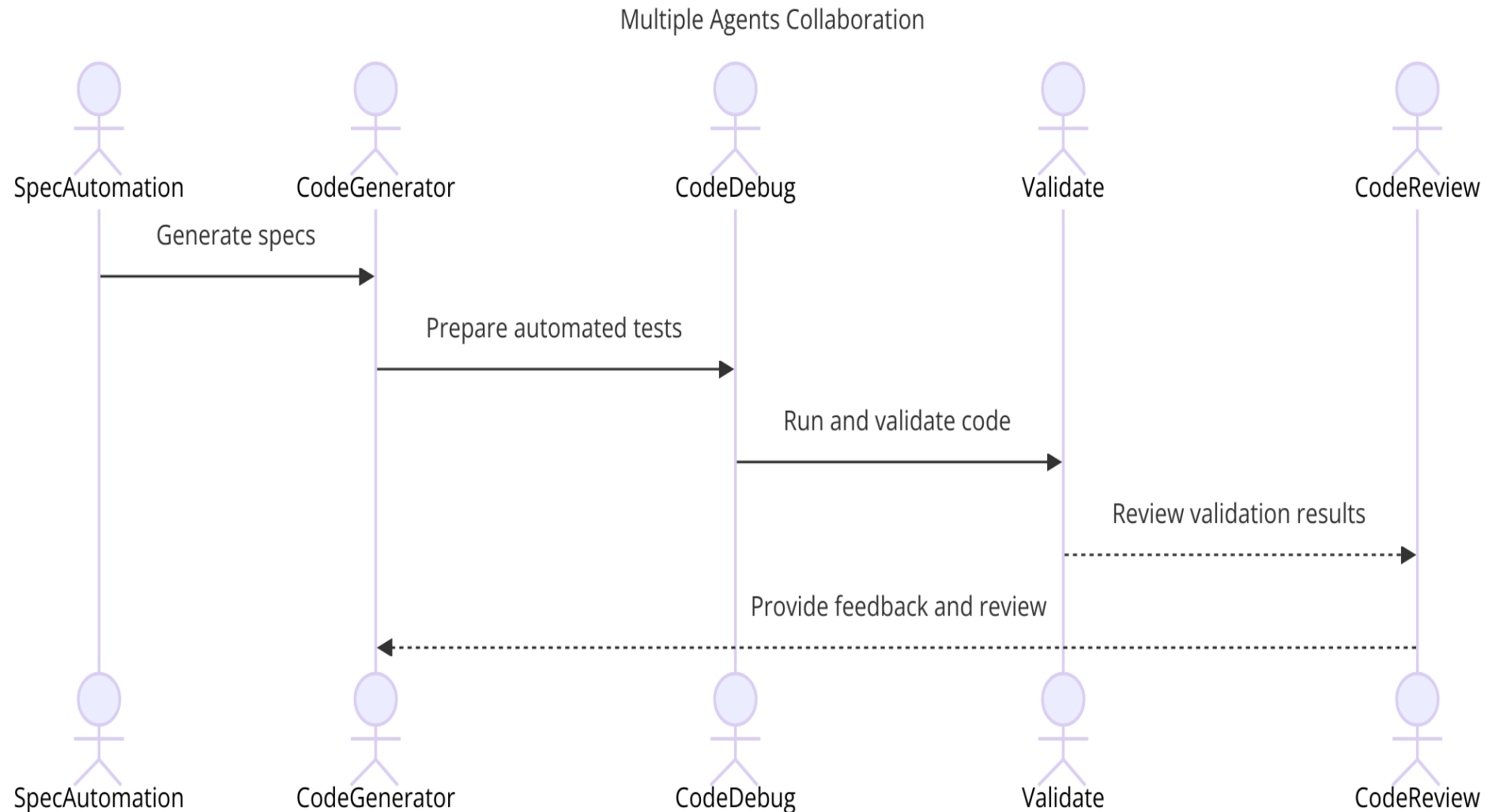
- **Industry Standards:** Utilize the mature `admiral` package within the industry as a basis to ensure that our solutions align with the best practices.
- **Code Management:** Build a robust code management framework using the tools and processes provided by the `admiral` package.
- **Continuous Updates:** Keep up with updates from the `admiral` package to ensure that our systems and practices are continuously optimized and improved.

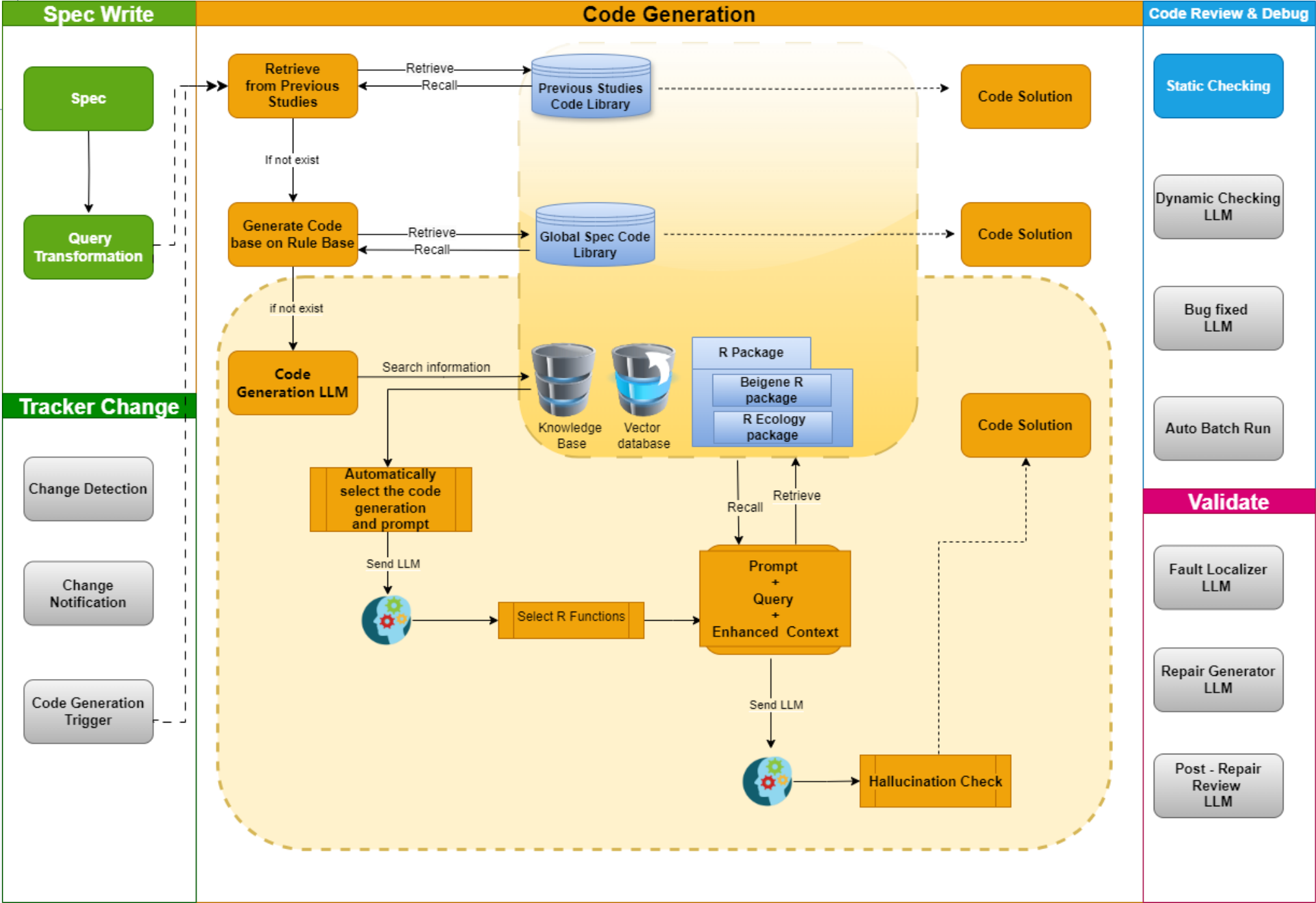


Code Intelligence and Repository Management for Optimization and Insights

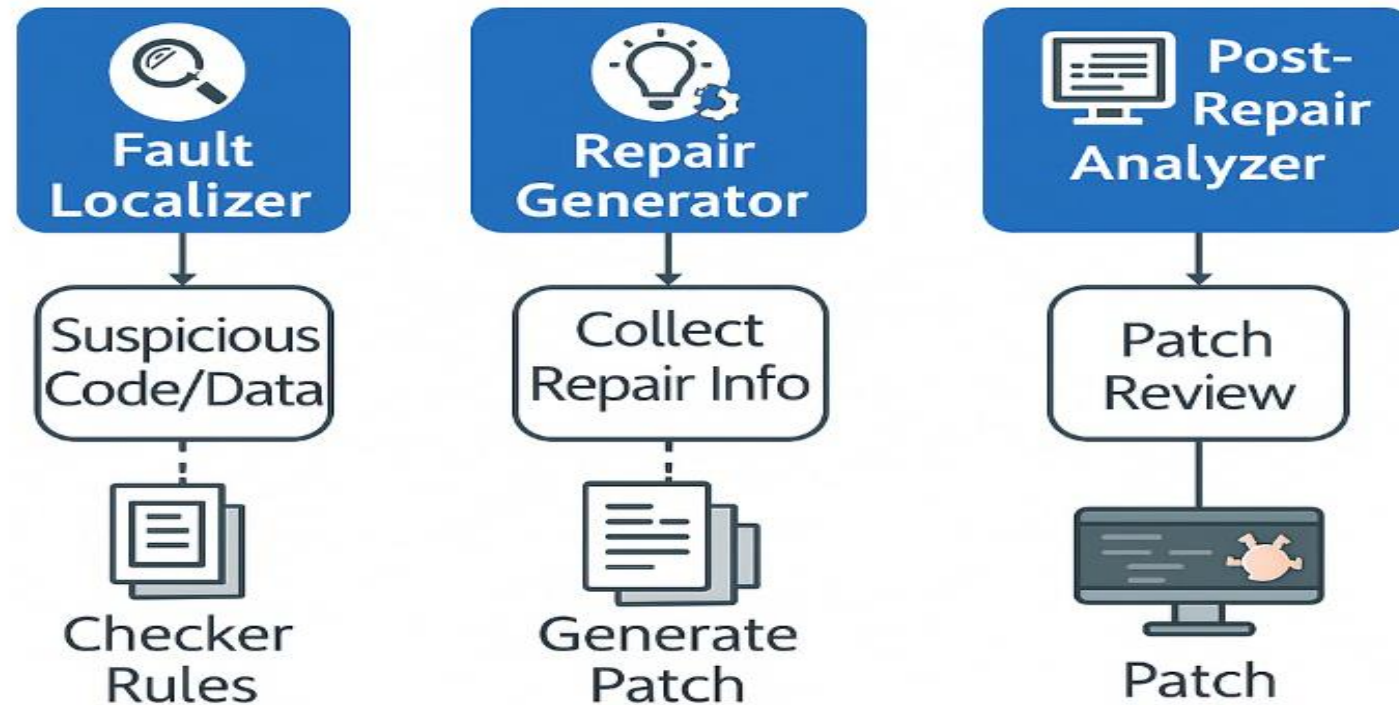


Collaborative Multi-Agents





FAULT RESOLUTION FRAMEWORK: IDENTIFICATION, REMEDIATION, AND POST-FIX EVALUATION



Validation

10+

[illegible]

▼
20%

Achieved over 20% resource savings, significantly reducing manpower and time costs.

Significantly improved code robustness and standardization, resulting in enhanced system stability, reduced error rates, and easier code maintenance and reuse, which dramatically boosts team collaboration efficiency.

Our Values Guide Our Work



Individual Level: Integration of Business and Technology to Enhance Personal Capabilities

- **Becoming a “Hybrid Talent”:** Master technical skills while understanding business needs, and applying technology to solve real-world problems.
- **AI as a Support Tool:** AI helps reduce repetitive tasks, allowing individuals to focus on analysis, creative thinking, and higher-value work.



Team Level: From Collaboration to Knowledge Preservation

- **Cross-Functional Collaboration:** AI acts as a “bridge” between business and technical teams, enabling efficient information sharing.
- **Expert Knowledge Preservation:** Leverage AI to convert domain experts’ rules into a knowledge base, facilitating future application and improving team efficiency.

Acknowledgements

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Q & A