

Human-in-the-Loop (HITL) AI for Software Development

Insights from an implemented Clinical Project

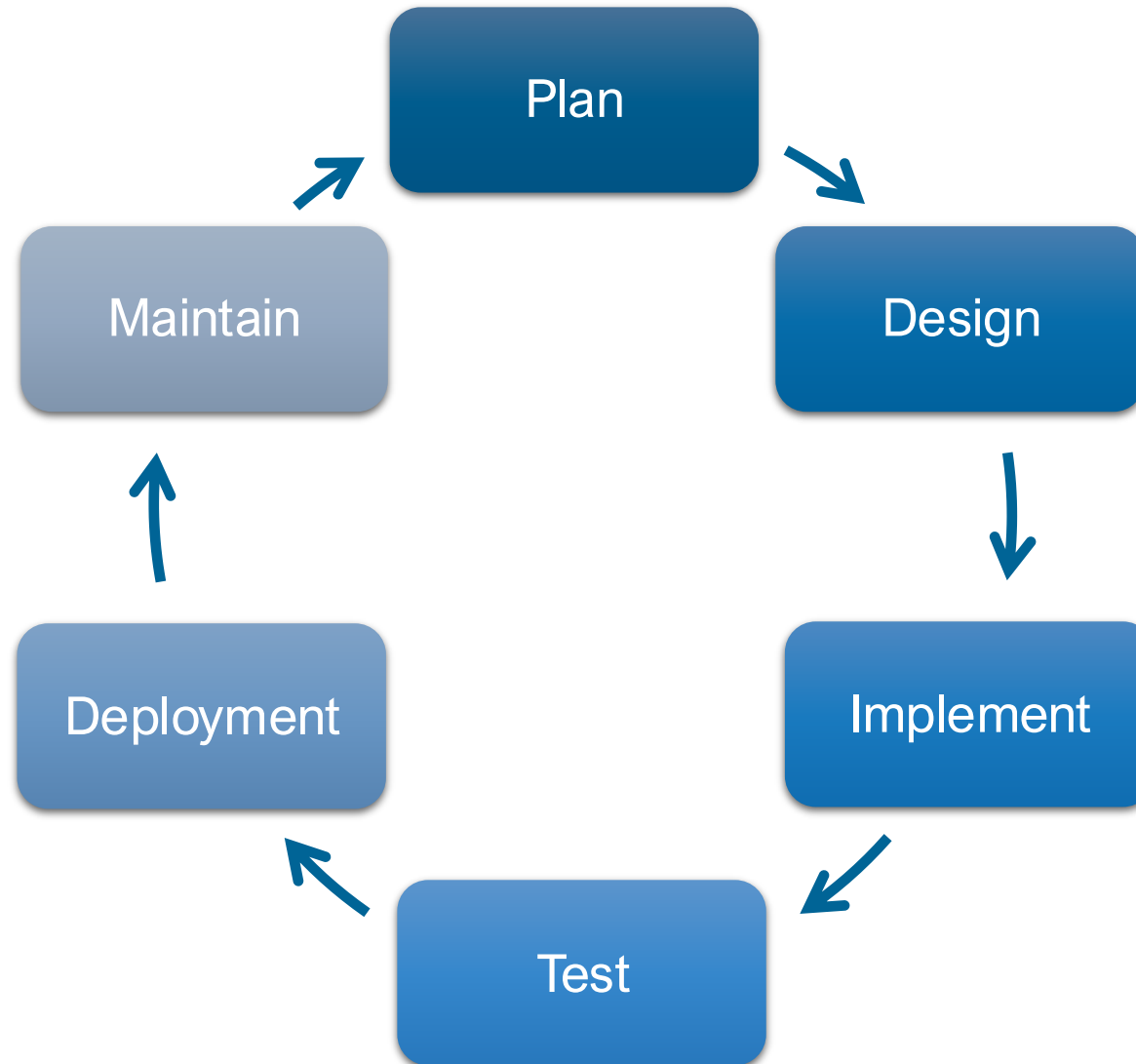
Ajay Sundaresan

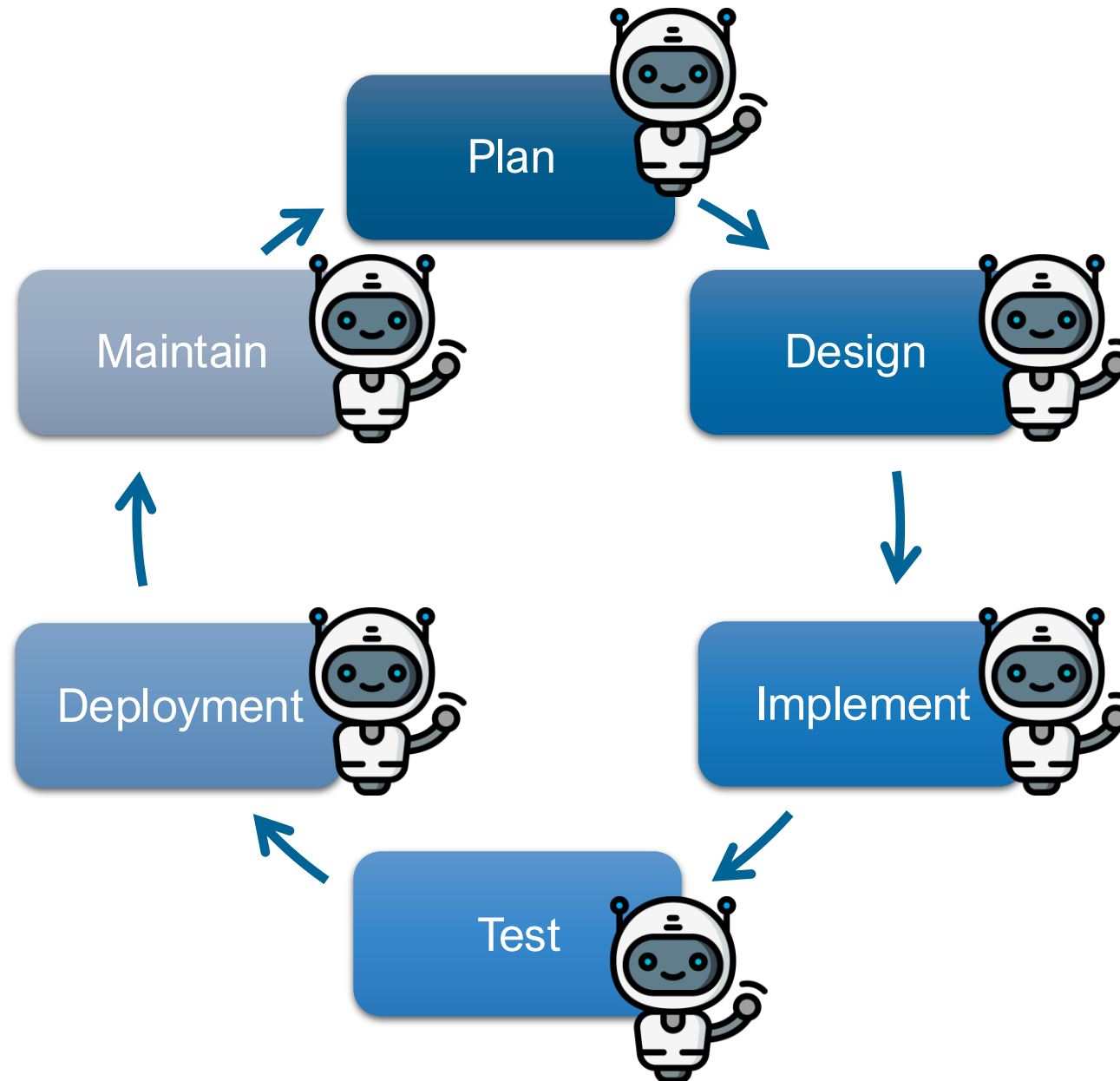
Clinical Solutions Architect

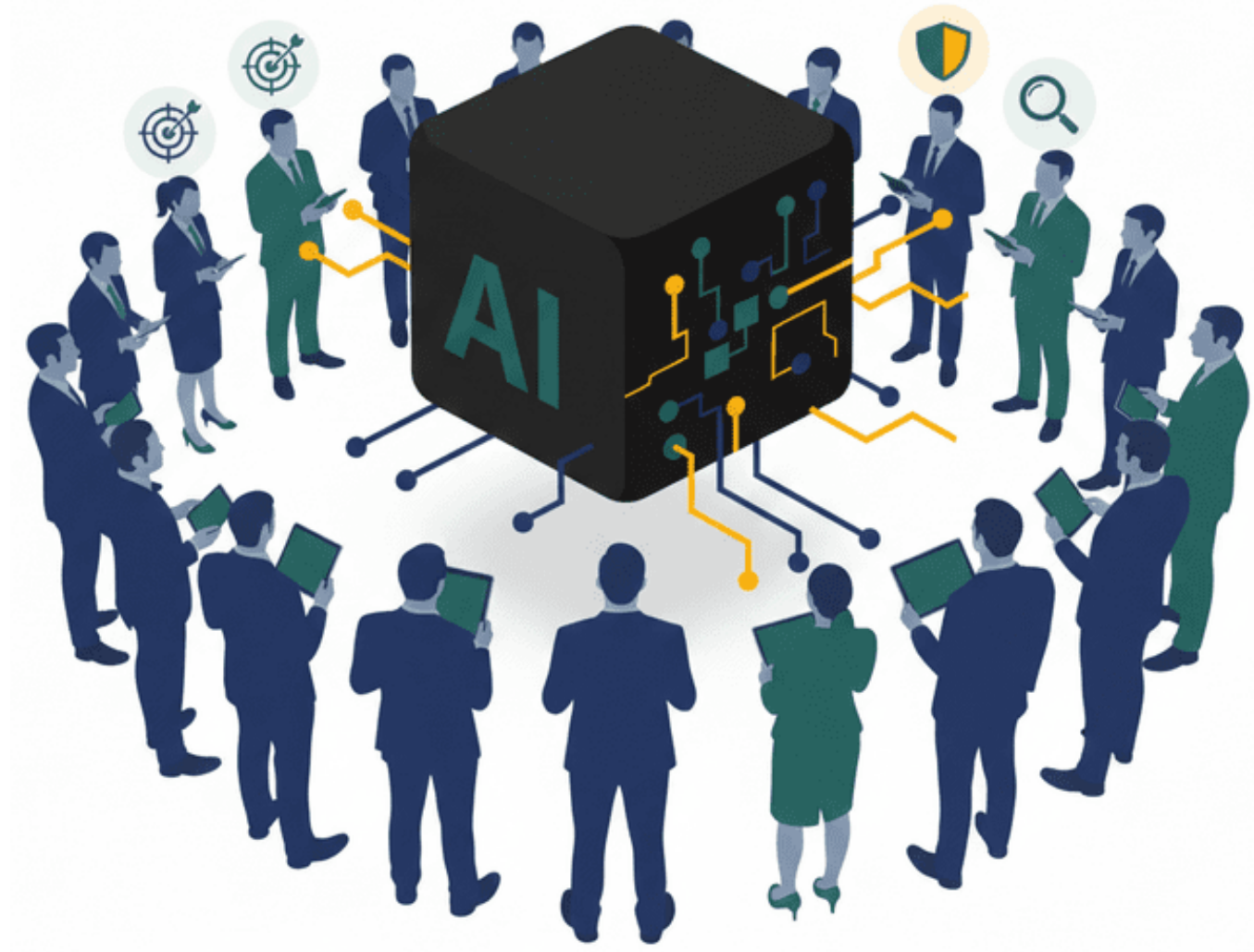
Stephan van Driel

Business Analytics Consultant



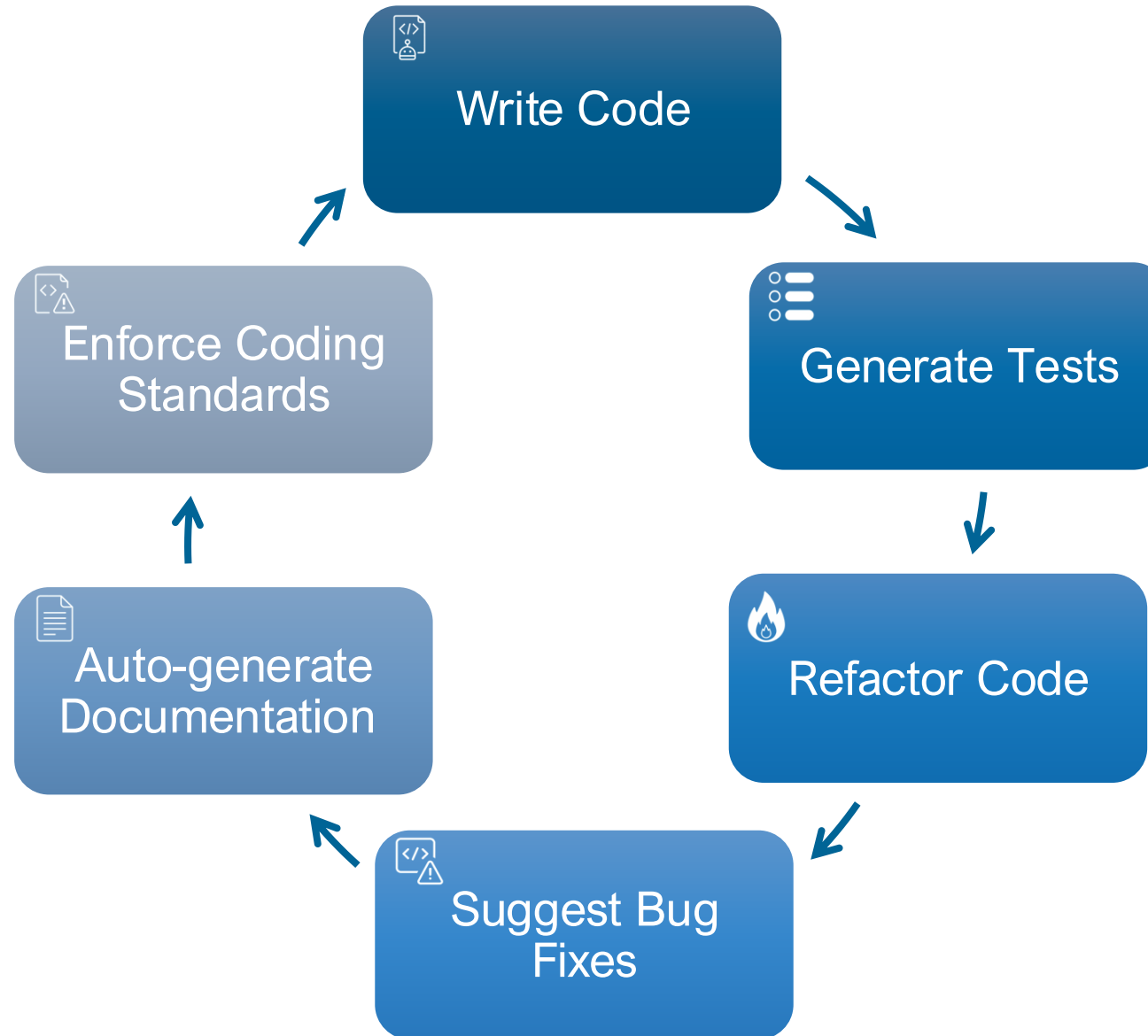








Leveraging AI for efficiency and providing the human context and judgment essential for robust software governance





Increased
Productivity



Improved
Accessibility



Enhanced
Debugging



Better Code
Quality



Increased
Productivity



Improved
Accessibility



Enhanced
Debugging



Better Code
Quality

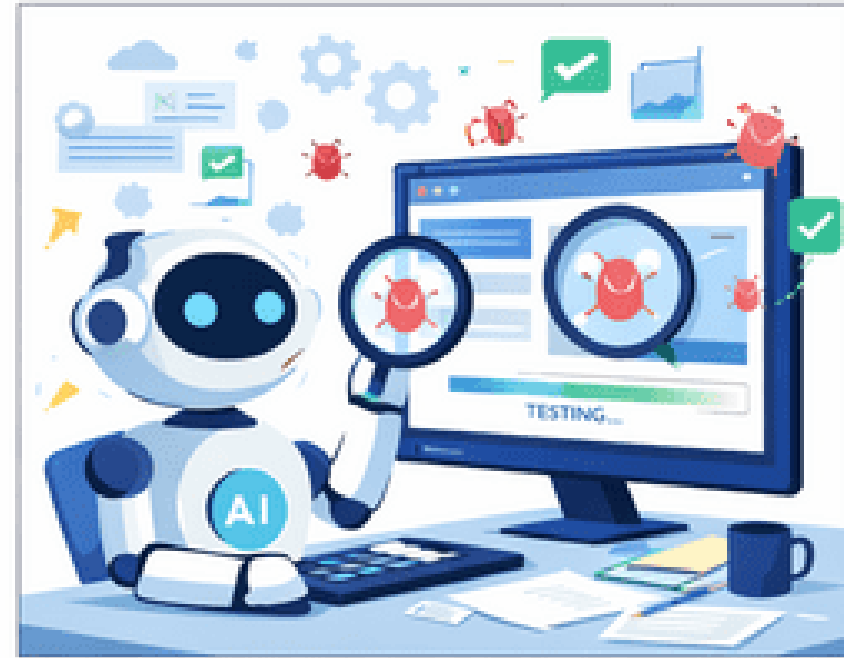
Generates code quickly



Reduces manual workload



Handles testing





Increased
Productivity



Improved
Accessibility



Enhanced
Debugging

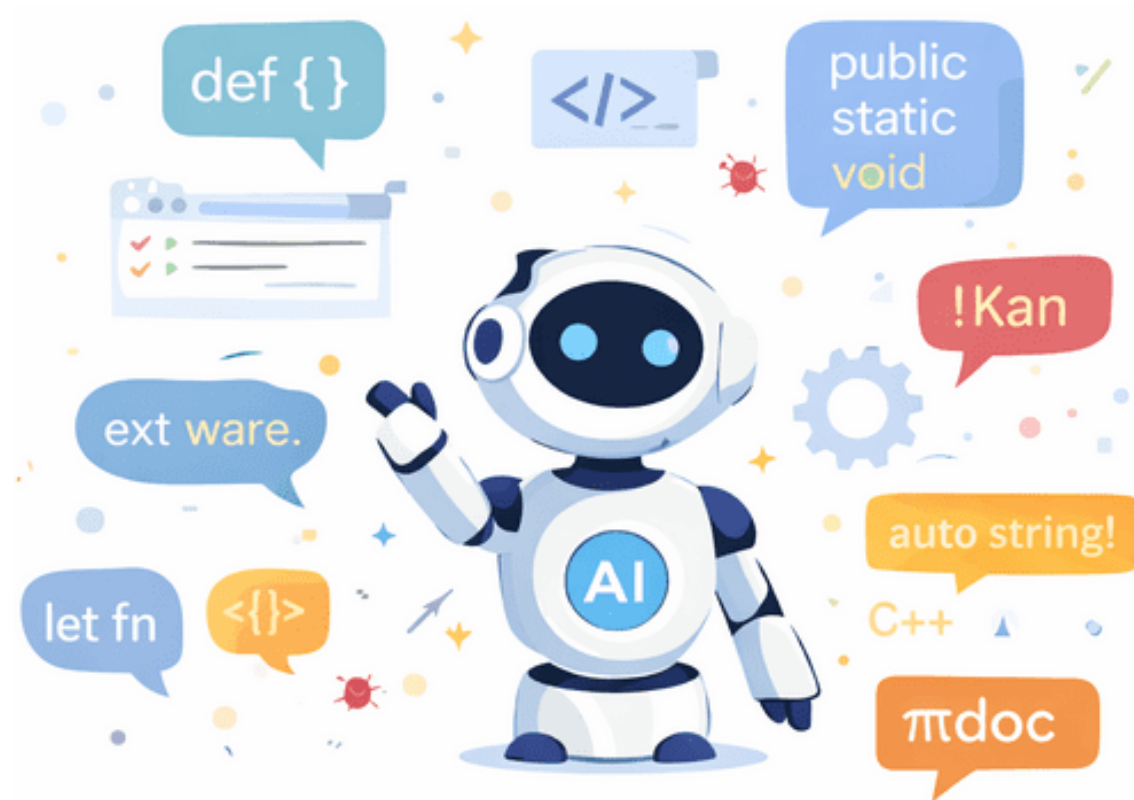


Better Code
Quality

Makes coding more accessible for non-developers



Handles syntax for new languages





Increased
Productivity



Improved
Accessibility



Enhanced
Debugging

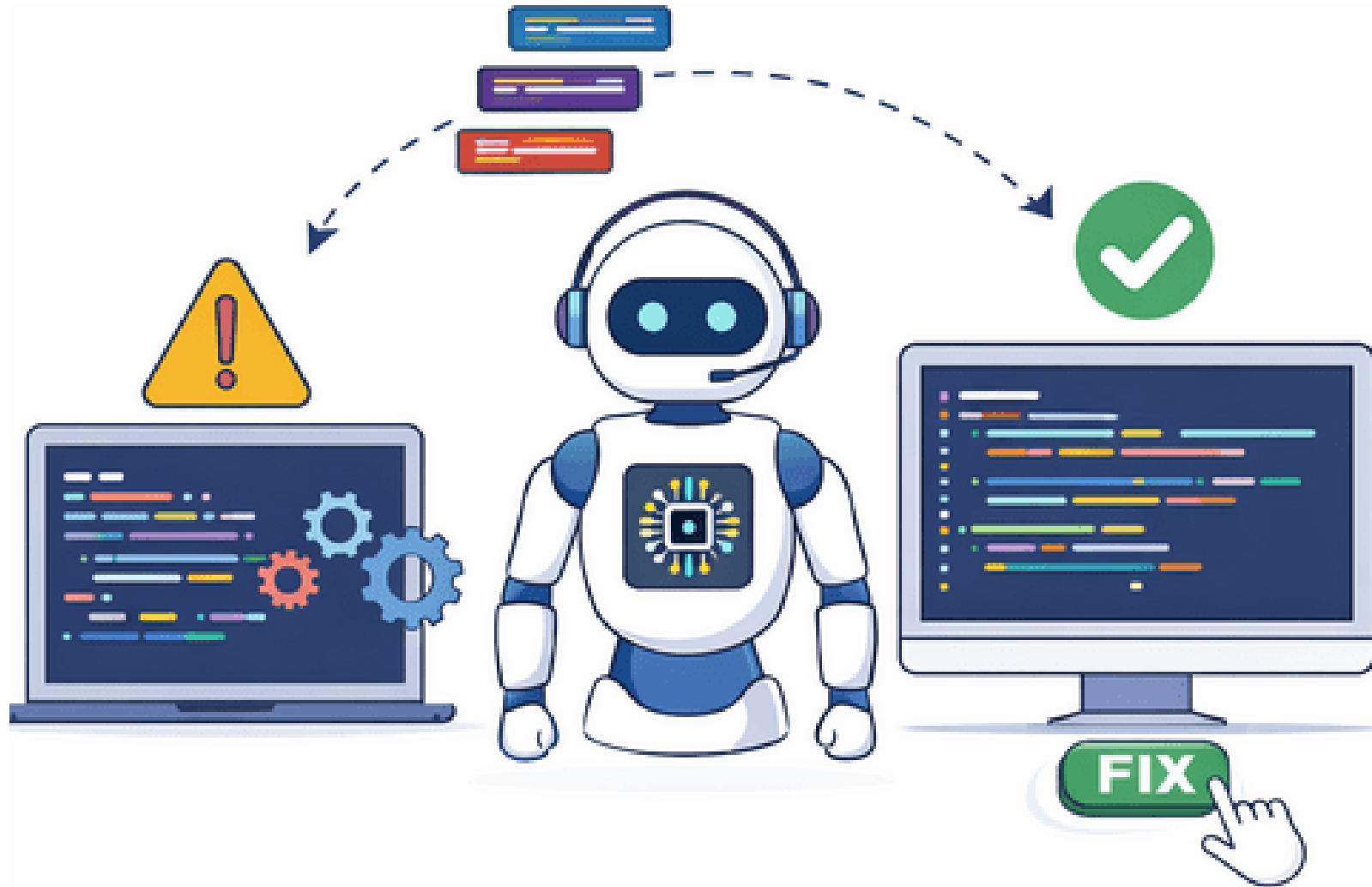


Better Code
Quality

Find errors quicker



Quickly fixes them





Increased
Productivity



Improved
Accessibility



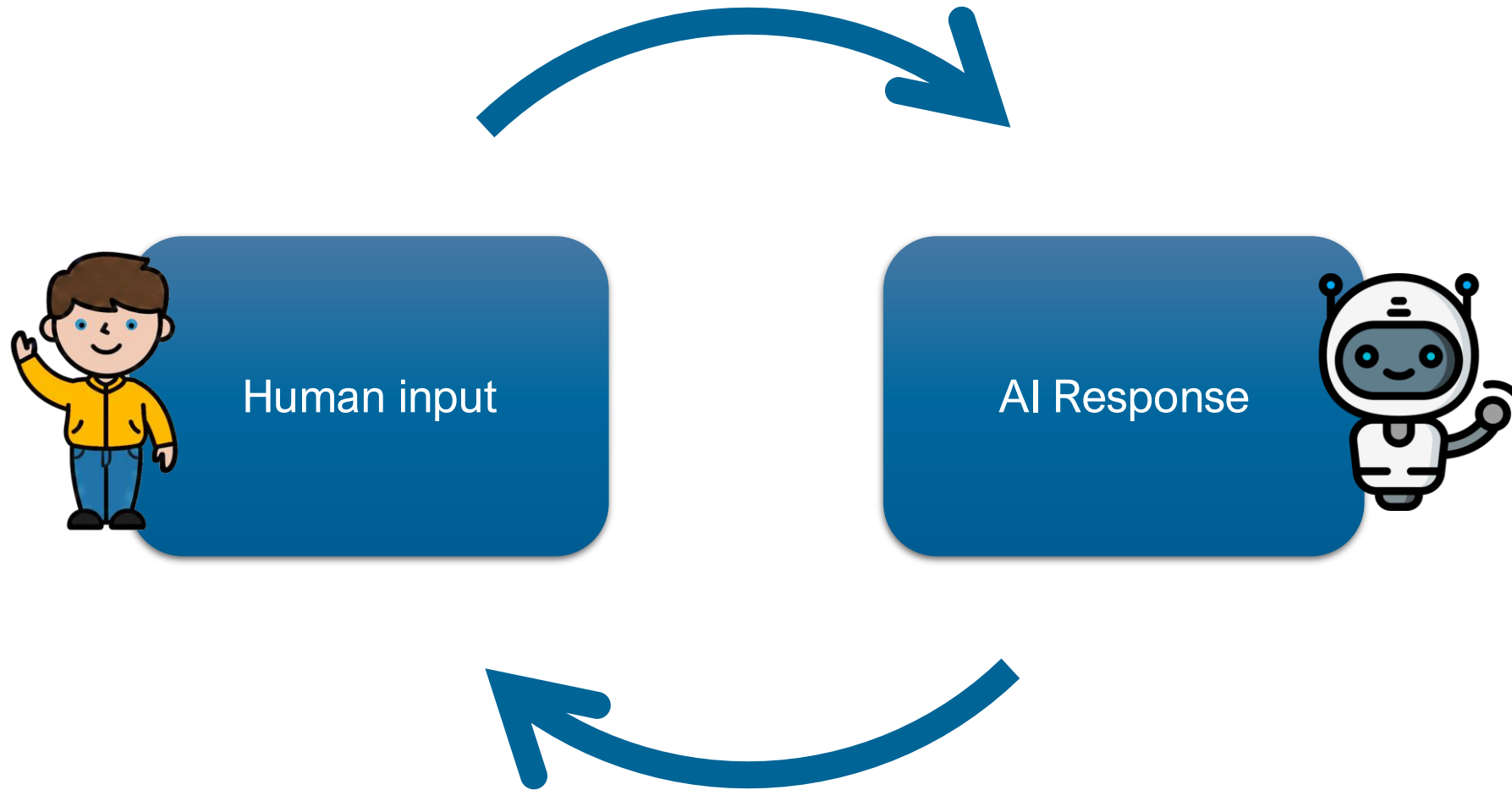
Enhanced
Debugging



Better Code
Quality

Enforces coding standards and best practices







**Accuracy
and
Reliability**



Accountability



**Transparency
and
Explainability**



**Accuracy
and
Reliability**

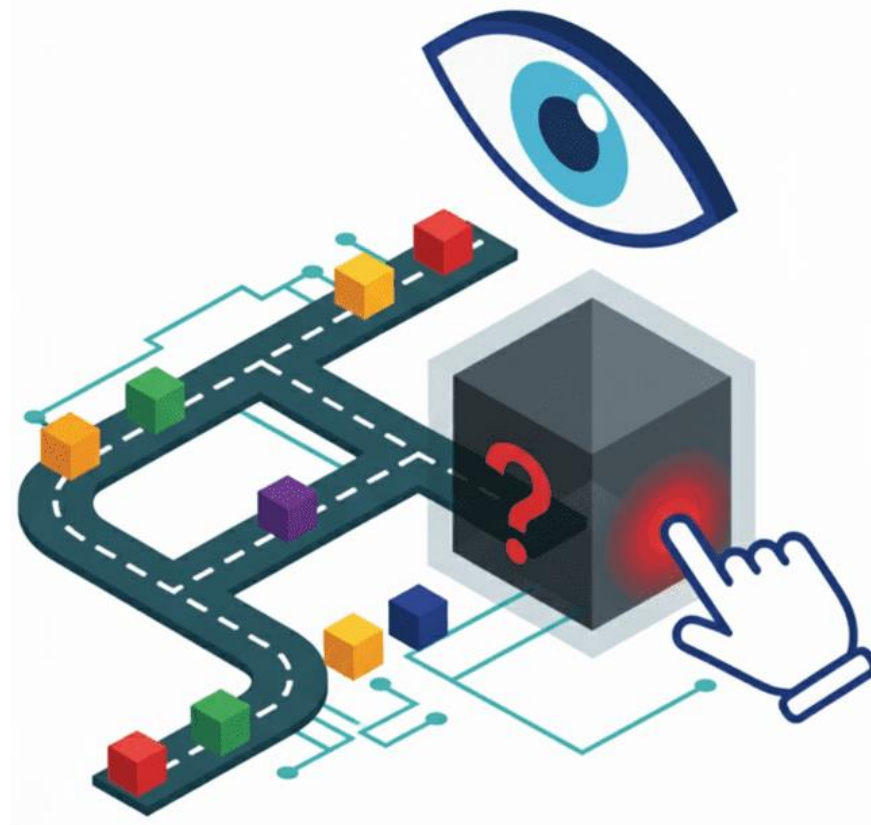


Accountability

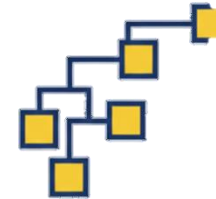
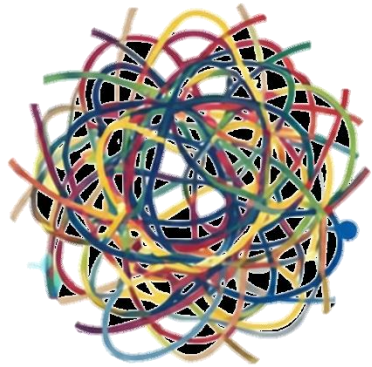


**Transparency
and
Explainability**

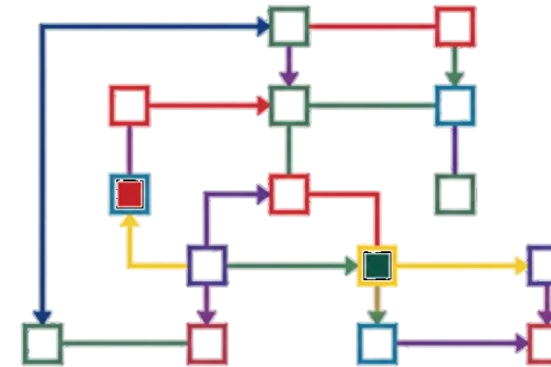
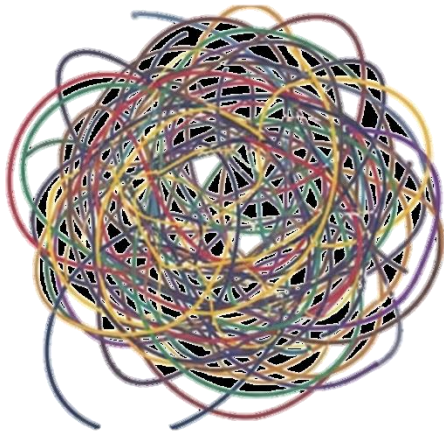
AI blind spots



Verify the logic



Refactoring and optimization





**Accuracy
and
Reliability**

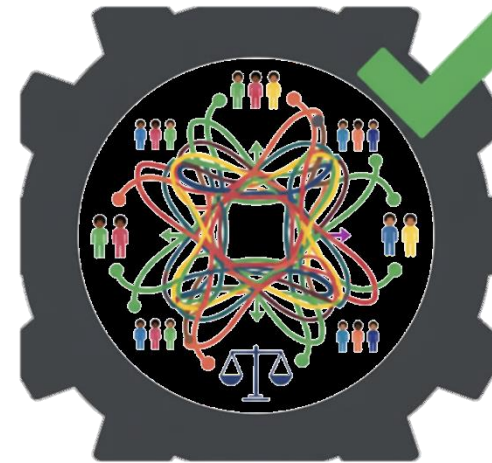
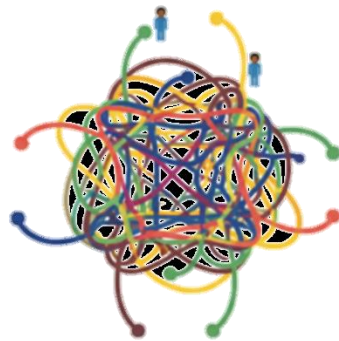


Accountability



**Transparency
and
Explainability**

Algorithmic bias



Legal liability and intellectual property



Final approver and ethical gatekeeper





**Accuracy
and
Reliability**

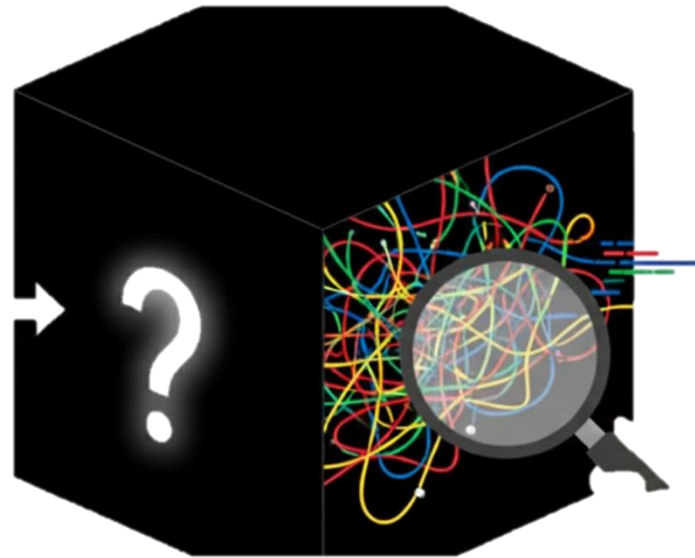


Accountability

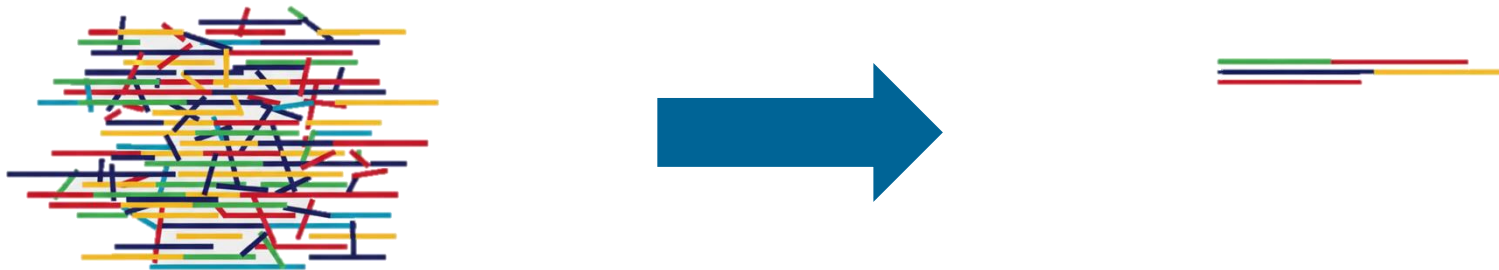


**Transparency
and
Explainability**

The 'Black Box' problem in code generation



Documentation, readability, and maintenance



Human expertise as the ultimate explainer





Best Practices

Do not overwhelm the AI



Keep Files
Under 500 Lines

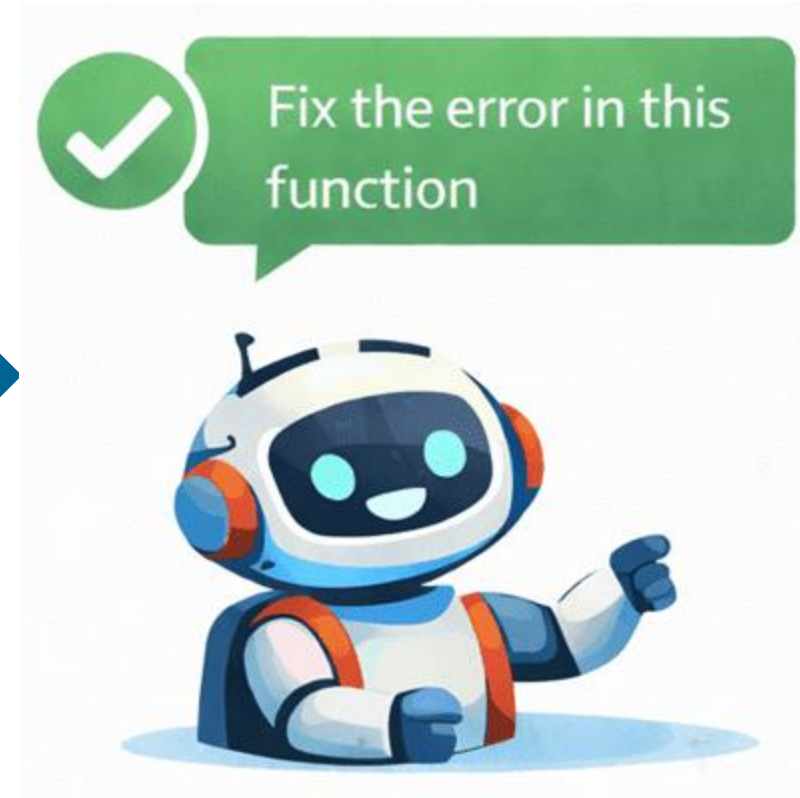
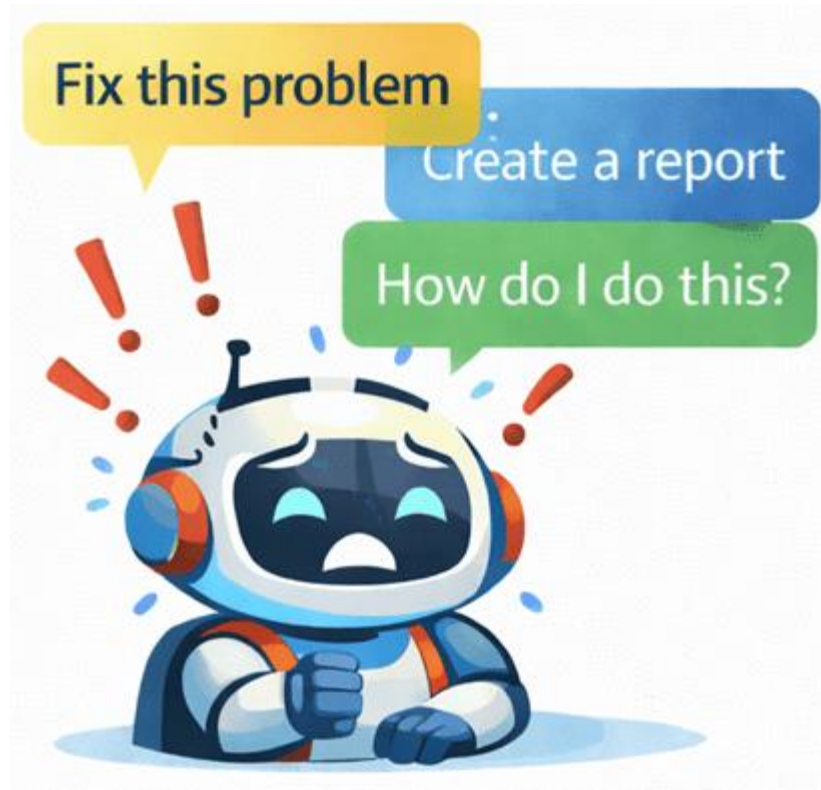


Start Fresh
Conversations Often

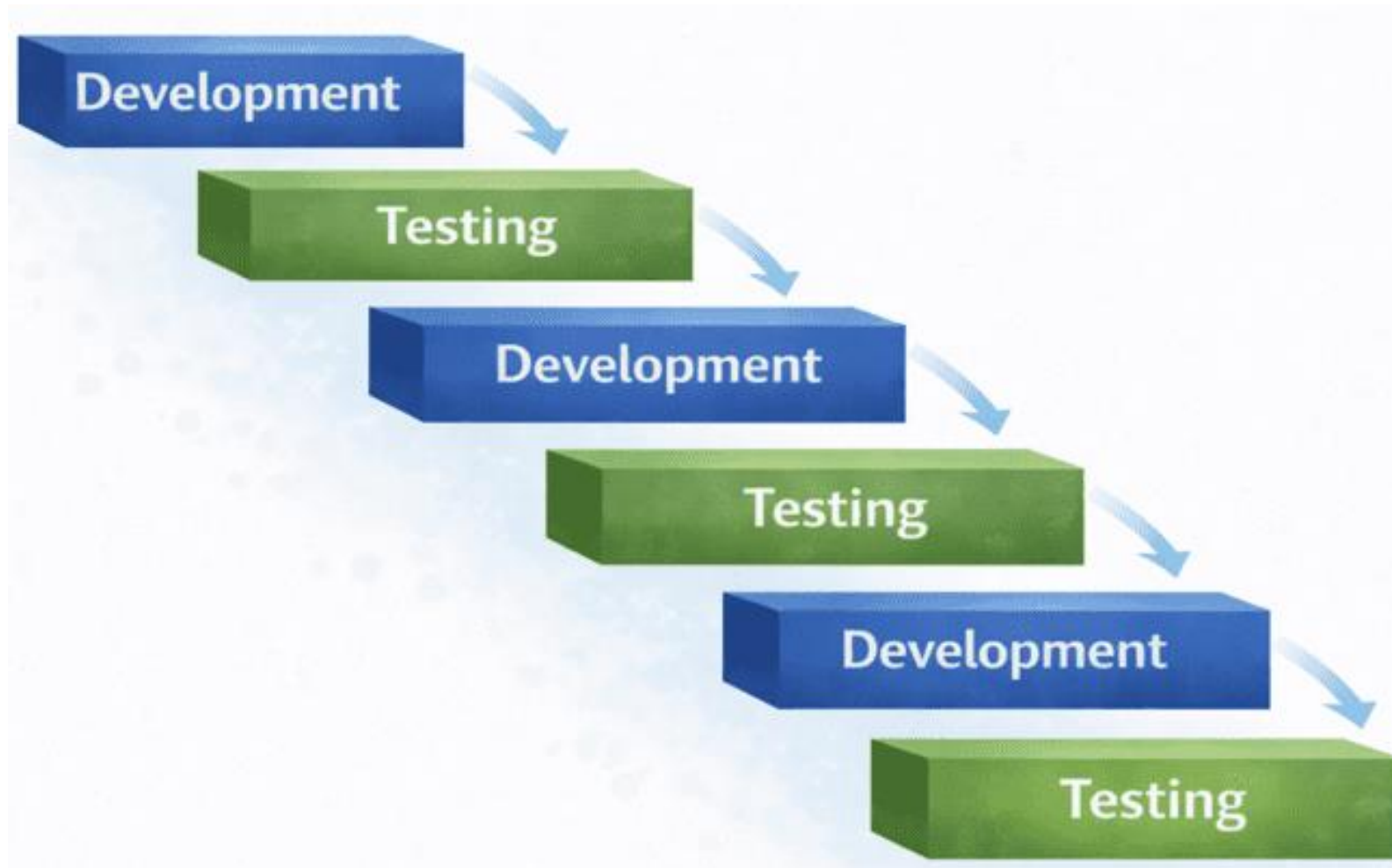


Do not
Overload the Model

Be as specific as possible

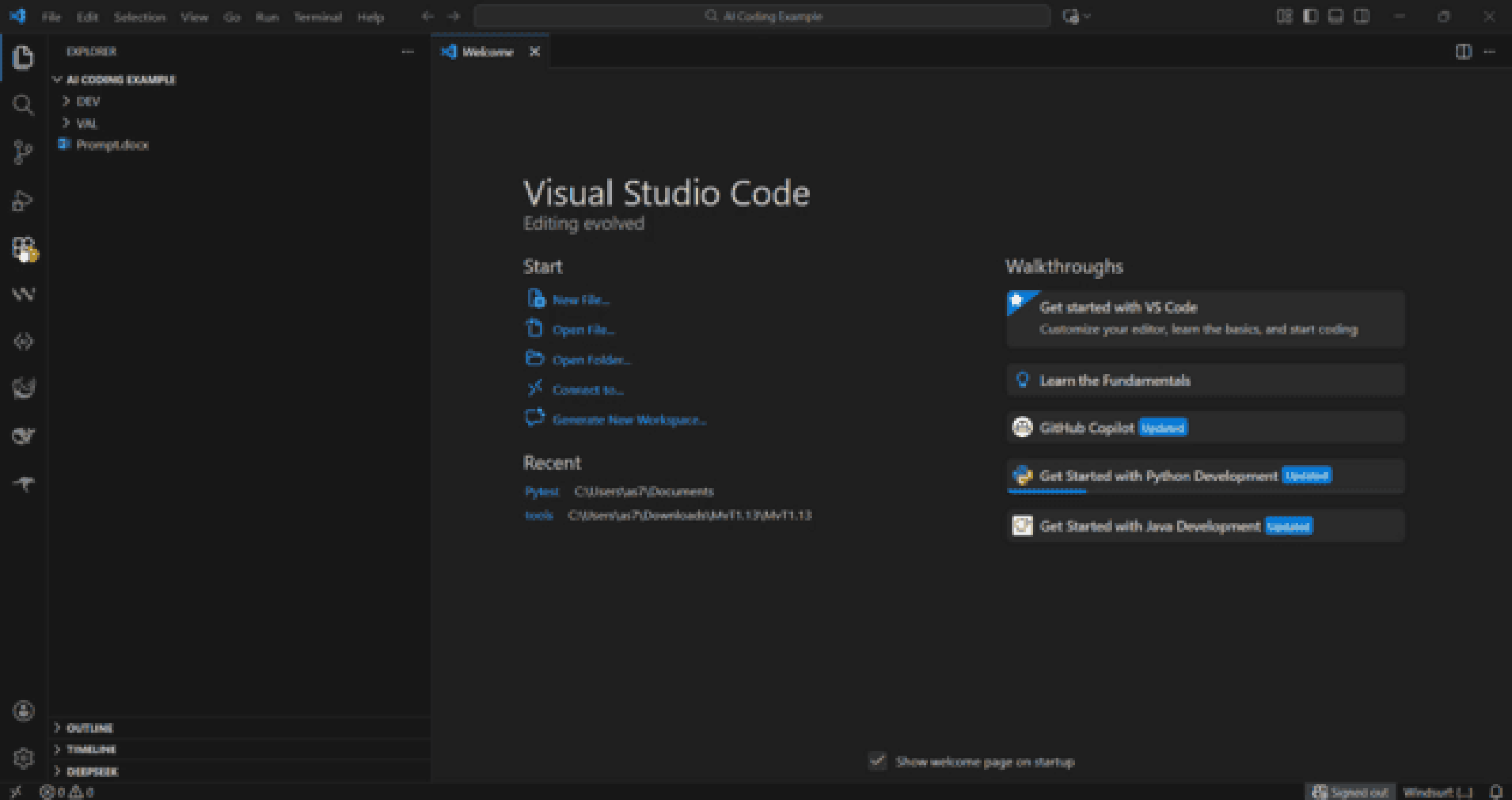


Test often





Demo





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Embrace AI's Value: Maintain Human Control



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