Pairing – When Two Heads Are Better Than One

Presented by: Linda Westfall

SOFTWARE EXCELLENCE ACADEMY
THE WESTFALLTEAM

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Logistics

- Attendees are on mute
- Type your comments & questions into the Question area – Linda will answer questions during & at the end of the webinar

Logistics

- You will receive an email tomorrow:
  - Which is verification of attendance for RUs, PUs, etc.
  - Telling you how to access the recording – please feel free to share this recording with your colleagues

Pairing Defined

Pairing is a development technique where two people collaborate together to create or modify a single software work product.

Pairing Process

Driver:

- Thinks tactically: actively creating the work product
- Controls the keyboard & mouse
- Implements the solution

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- Offers insight, ideas & suggestions

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Swap roles as needed

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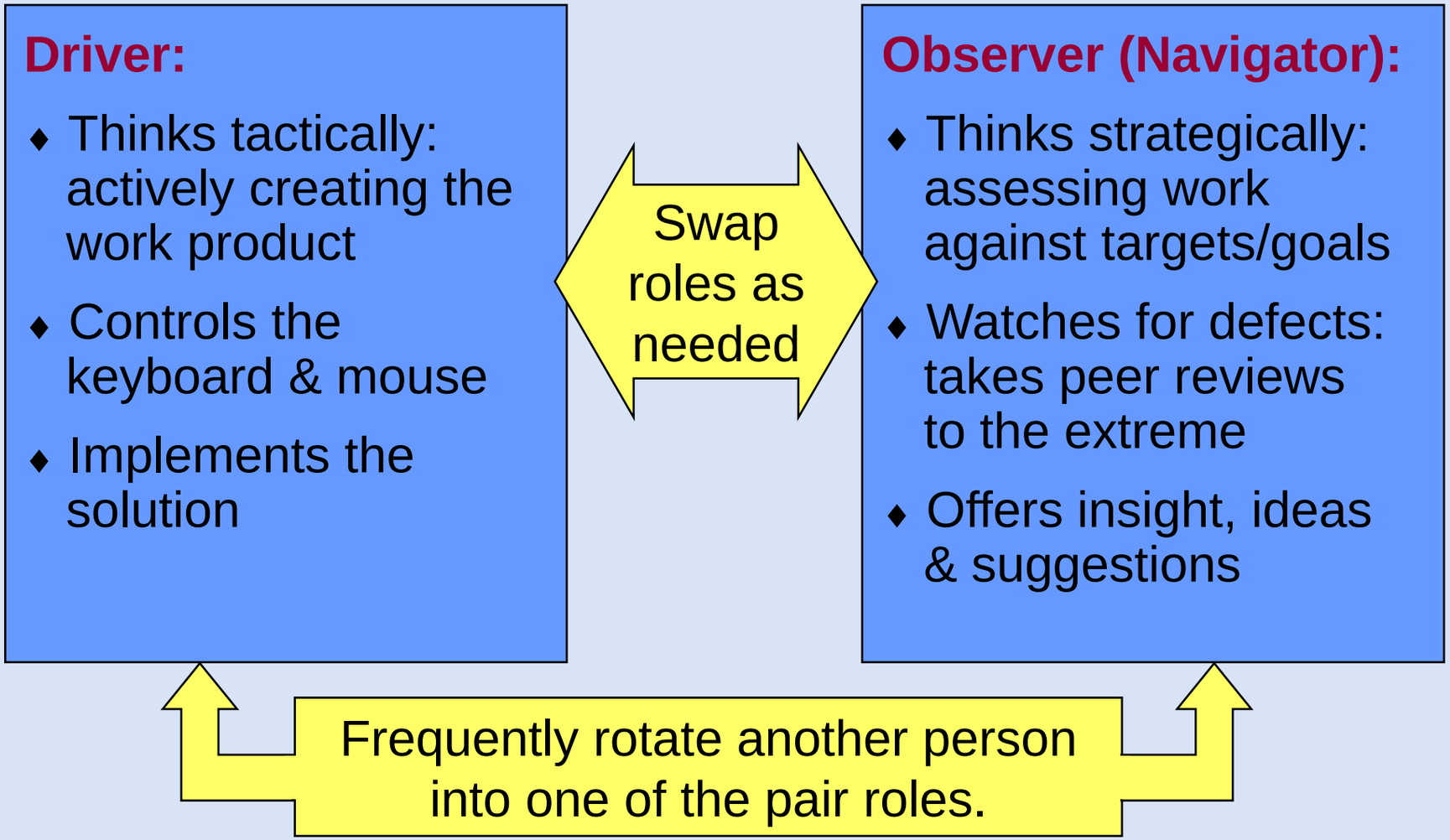
Pairing Process



Ping-Pong Method of Pair Programming

Person A

Write a Test Case that Does Not Pass

Person B

Ping-Pong Method of Pair Programming

Person A

Write a Test Case that Does Not Pass

Person B

Write the Code to Pass that Test Case

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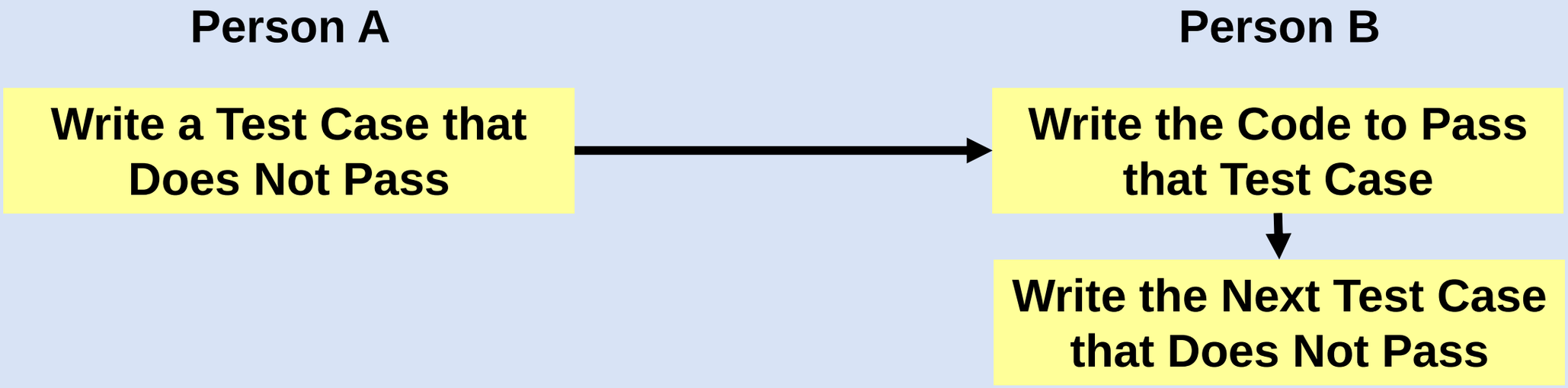

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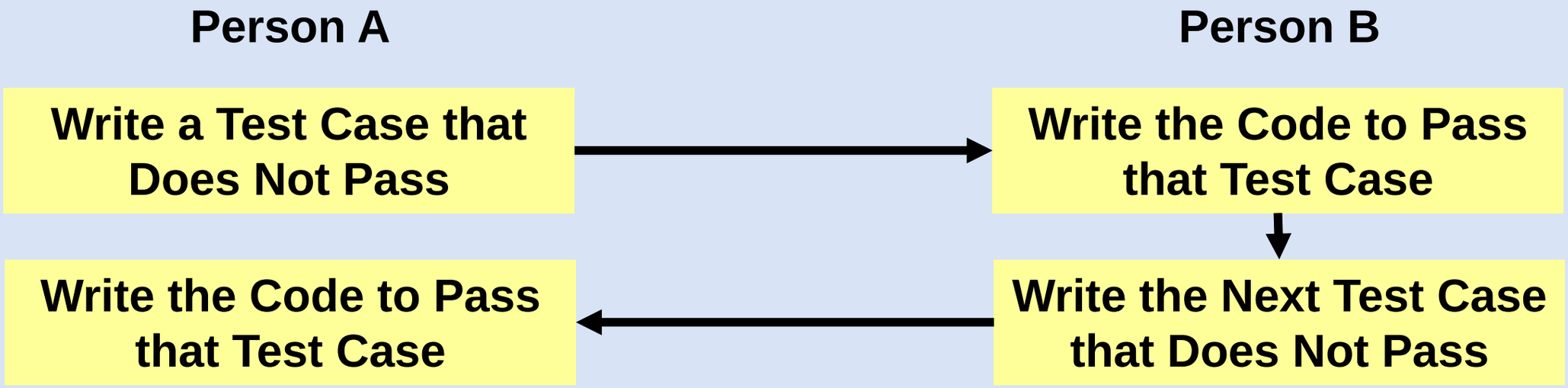

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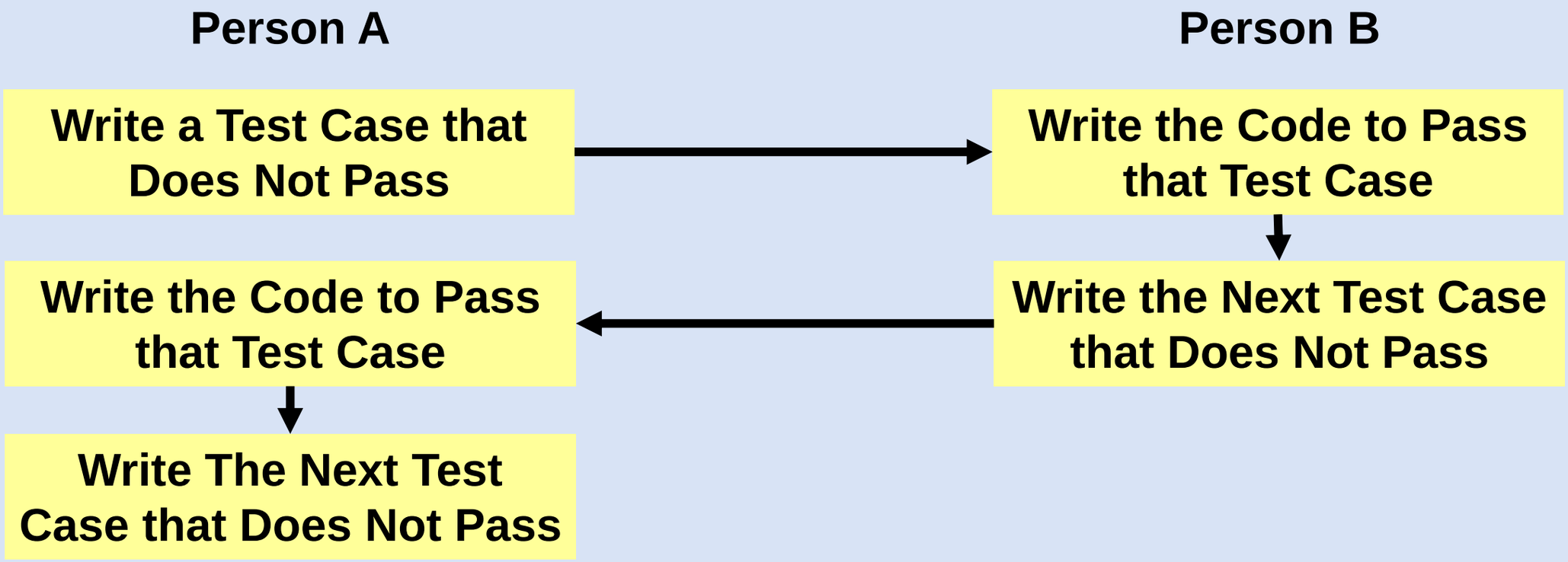

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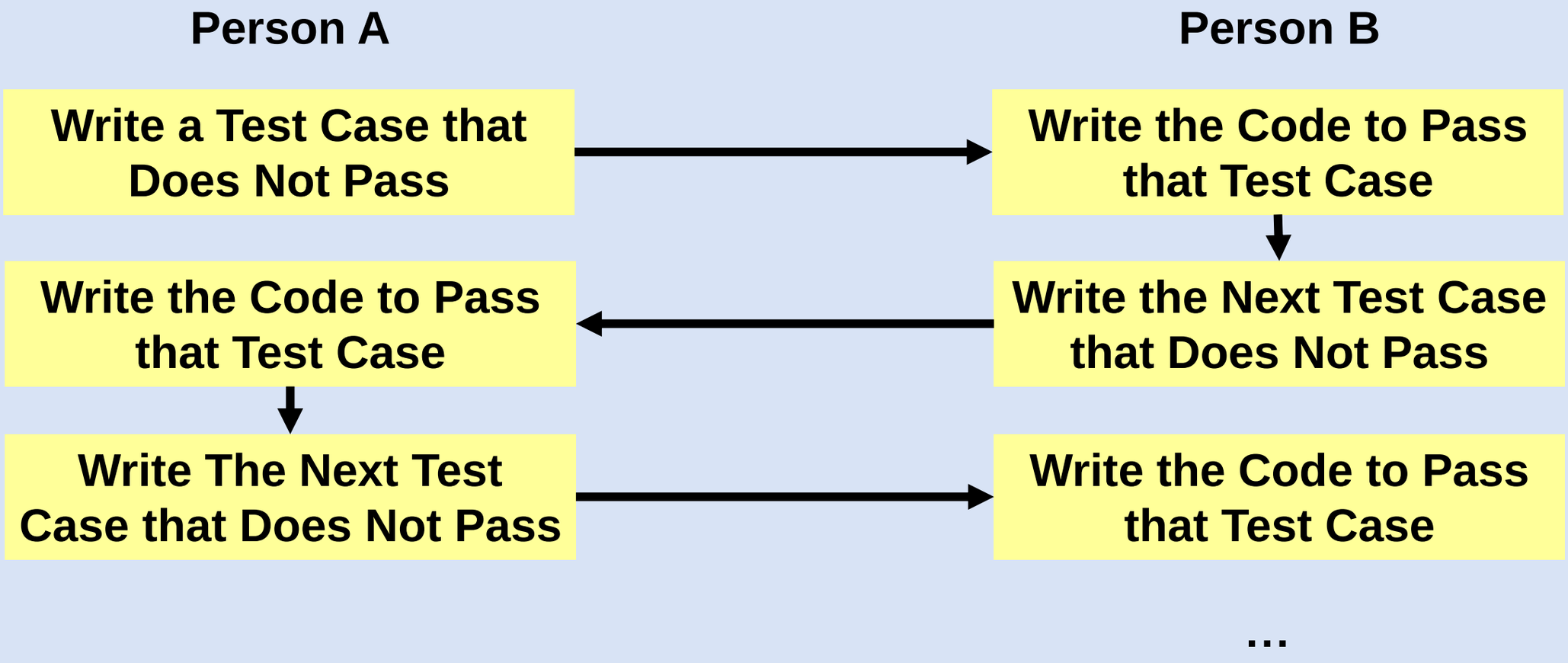


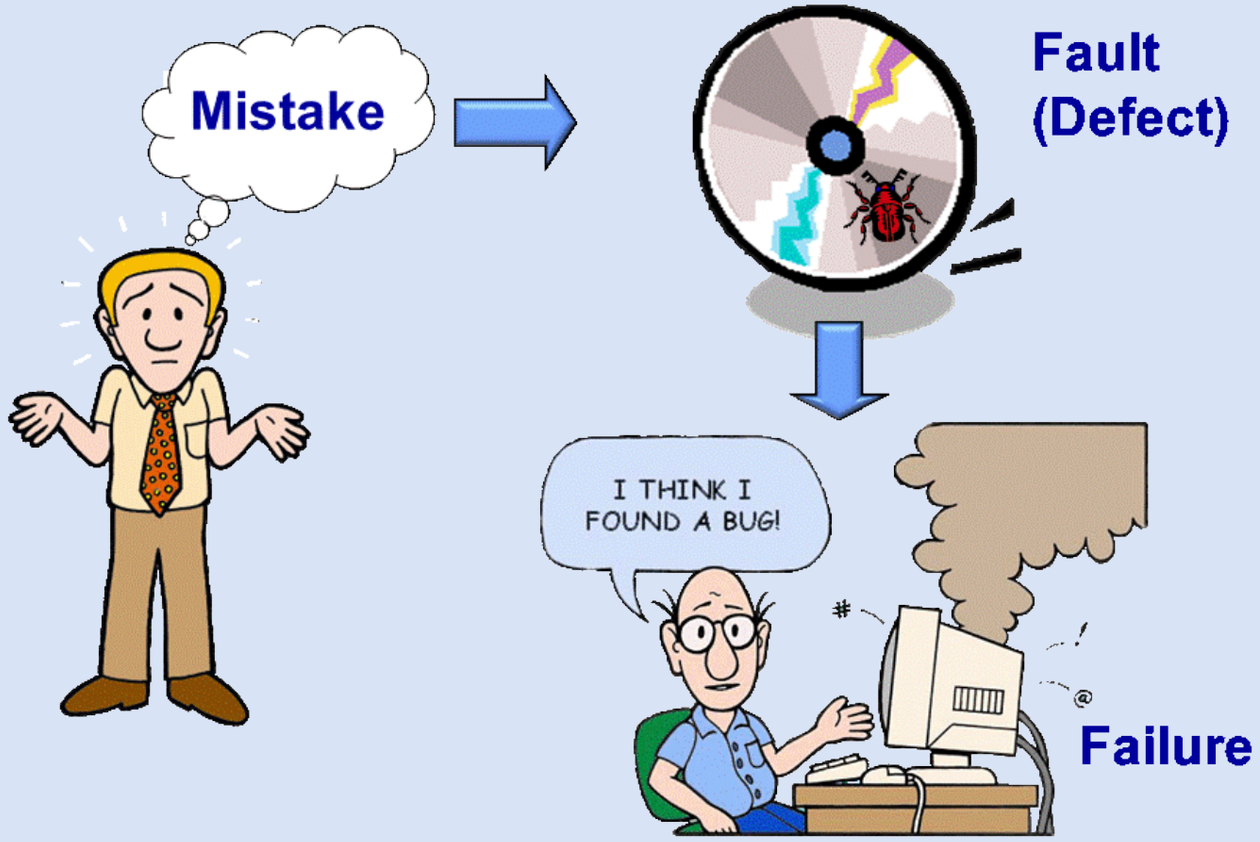
Benefit – Better Solutions

Two heads are better than one, especially in handling the complexities of software & considering all the engineering trade-offs, including:

- Programming languages
- Framework & processes (patterns & antipatterns)
- Internal & external libraries, macros & reusable components
- Design views & models
- Business domain
- Quality attributes

Benefits – High Quality

With two sets of eyes on the work product – there is a higher probability that mistakes will be detected leading to fewer defects.



Benefit – Knowledge & Skill Sharing

Pairing increases the sharing of knowledge and skills.

- Junior person learns from the senior person (novice/expert)

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- Both people learn together (novice/novice or expert/expert with new tasks)

Benefit – Promotes Teamwork

Pairing promotes teamwork through:

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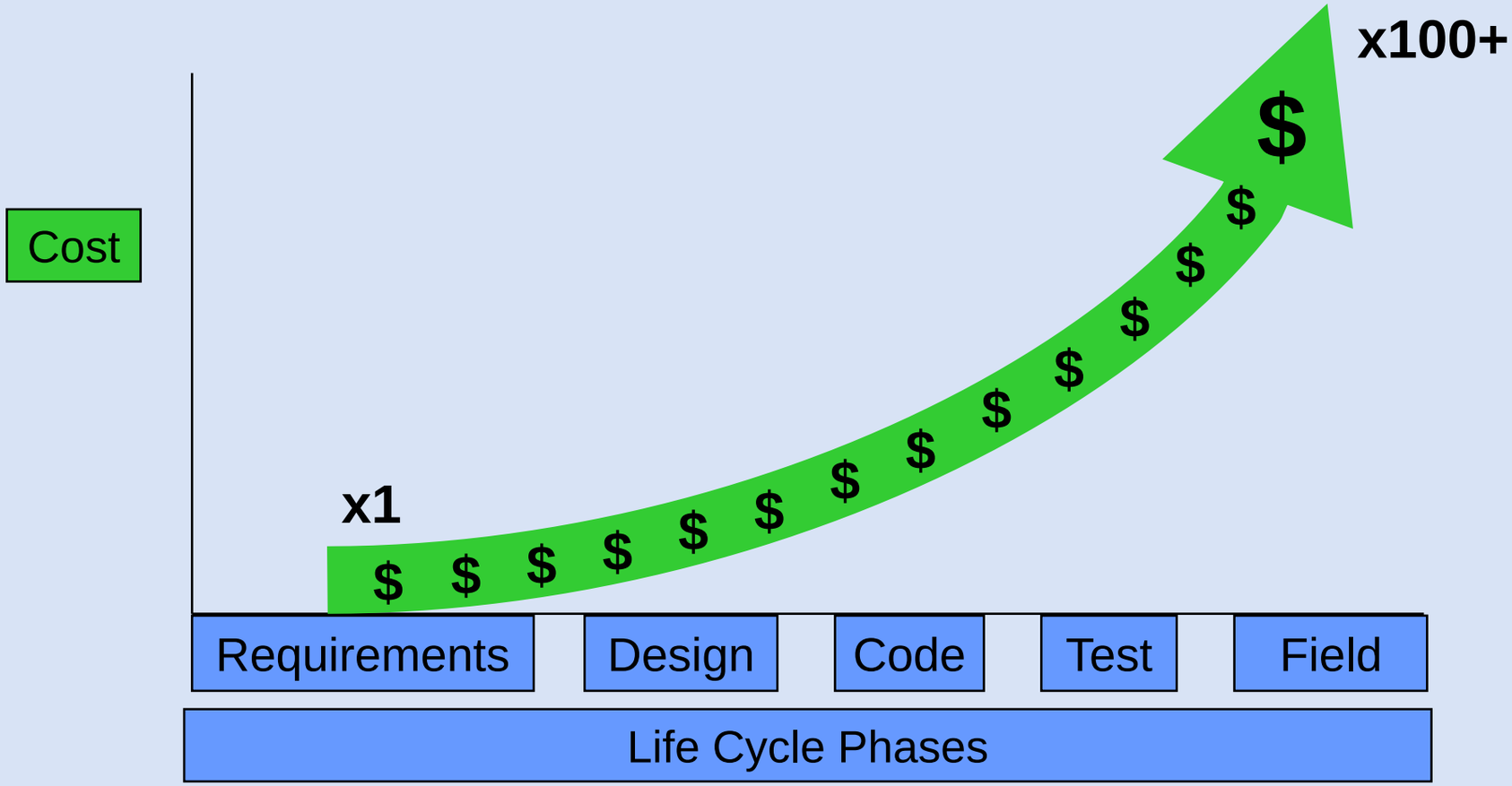
- Increased engagement & motivation
- Shared knowledge throughout the team

Challenges – More Effort

Pairing is an investment – the cost of fixing a defect increases exponentially the later in the life cycle it is detected.



Challenges – Human Issues

Working closely together as pairs brings up human issues:

- Personality types & personal preferences
- Cultural differences & diversity issues
- Political correctness concerns
- Different styles of work
- Personal hygiene

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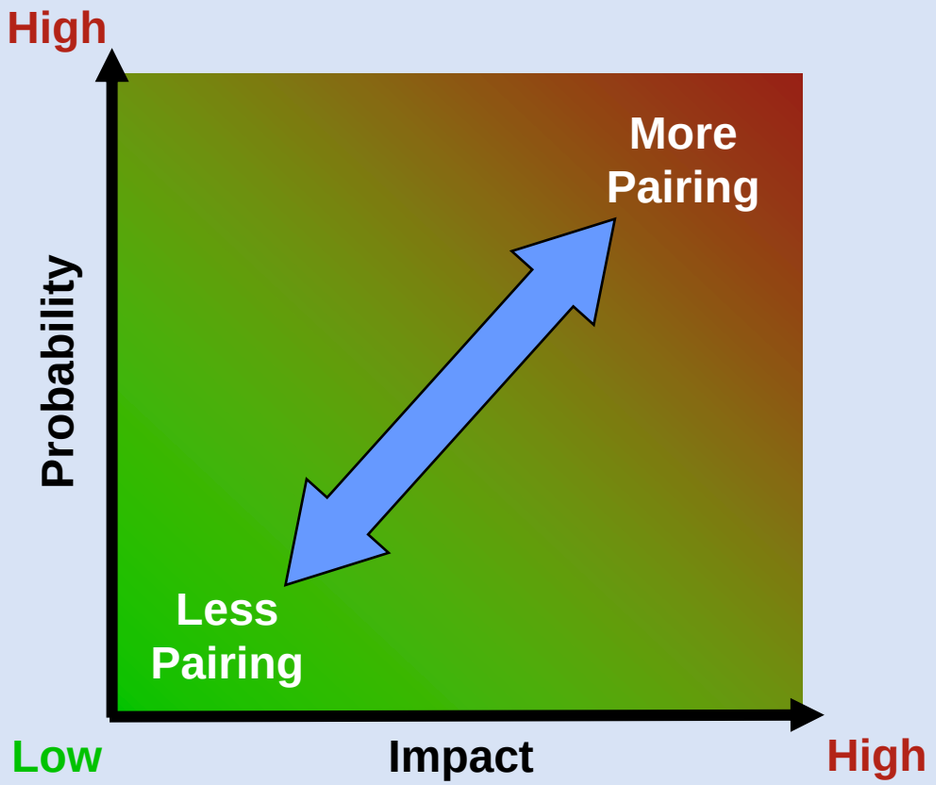
Increasing focus on these issues may be new or even uncomfortable to those of us who are used to working as individual contributors.

How To Implement – Risk-Based Pairing

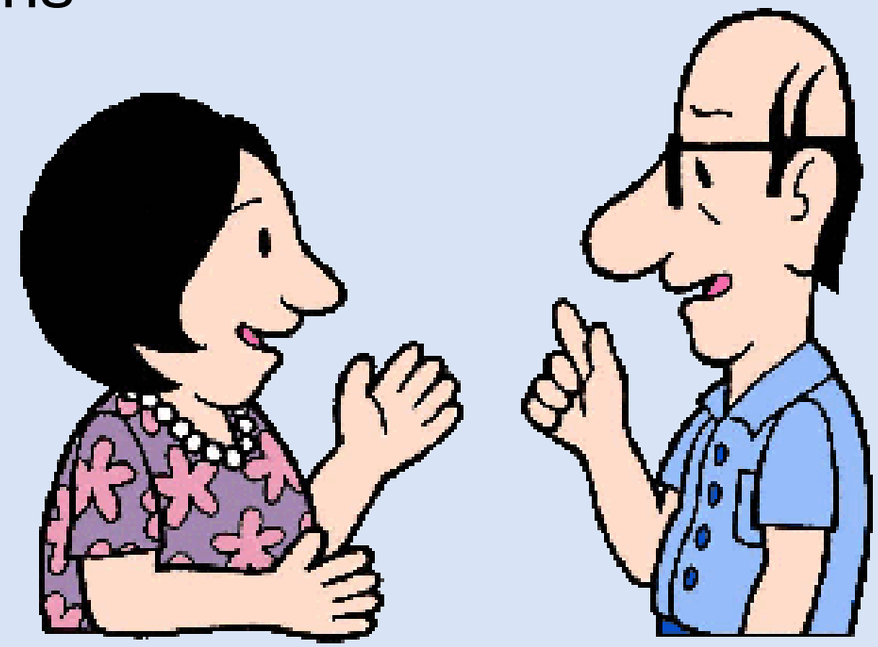
Use pairing for work products that are complex, high-risk, or critical.



How to Implement – Increase Communication

Pairing relies heavily on constant communication between the pair.

- Discussing alternative approaches & solutions



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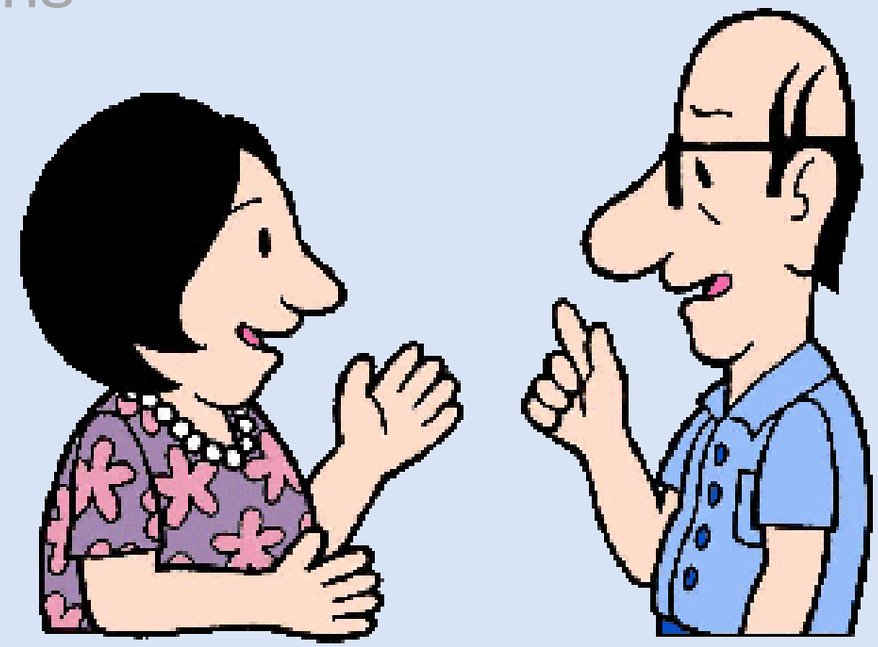

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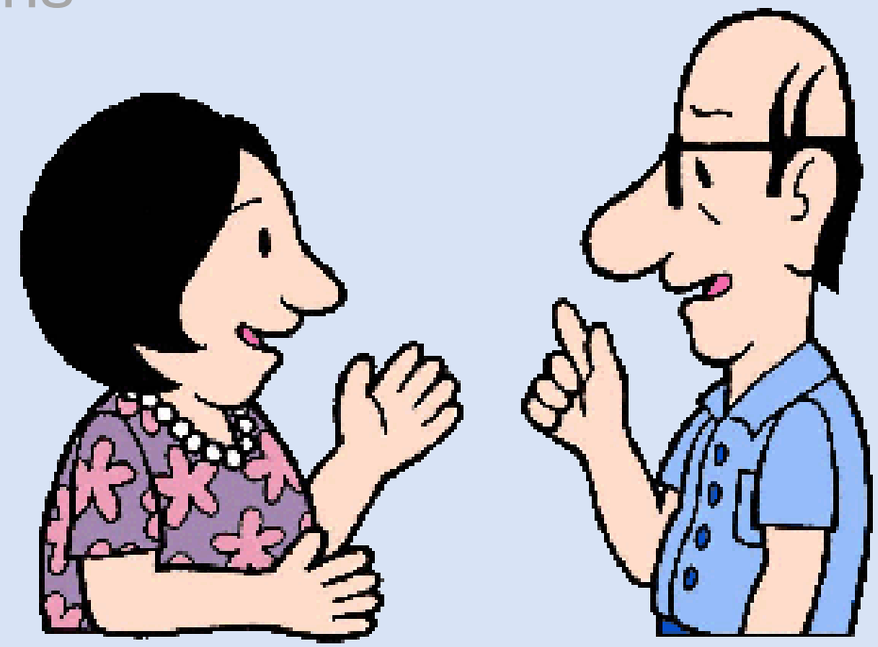

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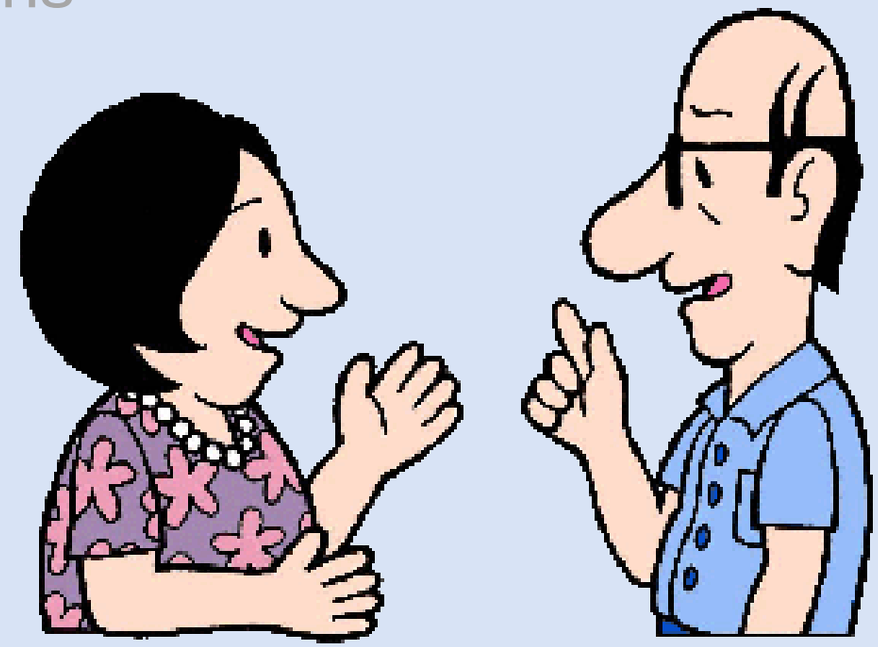
- Identifying, reporting & resolving issues
- Providing improvement ideas



How to Implement – Remote Pairing

When implementing remote pairing both partners should:

- Ensure a good internet connection
- Work in a place without noise or distractions
- Turn on their video cameras
- Utilize a headset for better audio communication
- Have the appropriate toolset: Collaborative real-time editor, shared desktops, or a remote pair programming integrated development environment (IDE)

Why Pairing

Better solutions, managing complexity, reducing the number of interjected defects, finding defects earlier in the life cycle, continuous learning, team building, and managing complexity are just a few of the reasons for implementing pairing in your software work product development.

Questions?

THE WESTFALL TEAM

Upcoming Webinars

February 2024: Topic of the Month – Agile

- February 28: A #NoFrameworks Approach to Agility presented by Scott Duncan

March 2024: Topic of the Month – Peer Reviews

- March 6: Are Peer Reviews Synonymous With Shift-Left? presented by Robin Goldsmith

https://www.softwareexcellenceacademy.com/webinars

Live Courses From Linda Westfall

Software Risk Management

April 29-30, 2024

9:00 am – 6:00 pm Central Time

Peer Reviews & Inspections

May 13-14, 2024 (New Date**)**

9:00 am – 6:00 pm Central Time

https://www.softwareexcellenceacademy.com/Live-Courses

Live Courses From Robin Goldsmith

True Shift-Left Secrets to Truly Quicker, Cheaper, but Better Software

April 11-12, 2024

10:00 am – 6:00 pm Eastern

Avoid User Story Conversation Traps

April 25, 2024

10:00 am – 6:00 pm Eastern

https://www.softwareexcellenceacademy.com/Live-Courses

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