



Agile Testing


What is Agile Testing?

- Agile Testing is a software testing practice that follows the principles of **agile software development**.
- Follows the **Whole Team Approach**
- **Testing is NOT a separate phase**, but a **SIMULTANEOUS ACTIVITY all throughout the Development Life Cycle**



Waterfall testing vs Agile testing


Testing is a different phase	Testing occurs simultaneous with the development
Testers usually work separately from developers	Testers and developers work together
BAs are the ones involved in the requirements phase	Testers are involved in coming up with the requirements
Acceptance Testing happens when all of the product development are done	Acceptance Testing happens at the end of each iteration





Waterfall testing vs Agile testing

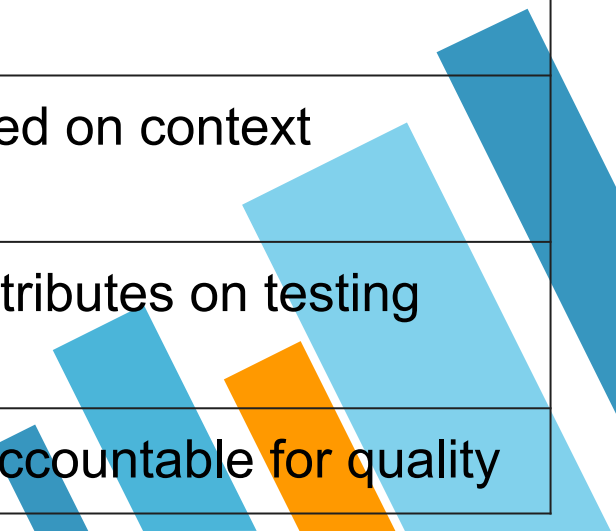
Regression is done at the end of the product development	Regression is completed for each iteration
Testing waits for coding to finish	Testing happens along with coding
Testing activities should fall within strict timeline	Testing activities can adjust based on context
Dev slips impact testing schedule	Delays from development is a project delay, not just testing
Quality is only for Testers	Quality is for everyone





Waterfall testing vs Agile testing

Test cases	Test Charters / Sessions / Mindmaps
Don't edit test cases during execution	Updates tests during/after execution
Tests are mostly based on requirements	Tests are based on context
Tests are created and executed by testers	Everyone contributes on testing
Quality is only for Testers	Everyone is accountable for quality






Agile Testing Principles




1. **Provide continuous feedback**

- a. Starts meaningful discussion
 - b. Feedback drives action
 - c. Saves time, money and company's reputation
- 




2. Deliver value to customer

- a. Testing according to priority
 - b. Additional requests are deliberated by the team
 - i. Impact
 - ii. Value
- 




3. Enable Face-to-Face Communication

- a. Transparency for everyone
 - b. Having every role's perspective
 - c. Faster resolution
 - d. Avoid email and chats
- 




4. Enable face-to-face communication

- a. To ask for help
 - b. To clarify
 - c. To suggest
- 



5. **Keep It Simple**

- a. Simple approach to meet the customer's requirements
 - b. Analyze but don't over complicate
 - c. As long as it delivers the same value
- 




6. Practice Continuous Improvement

- a. Defect Logging
 - b. Retrospective
 - c. Pair Testing
- 




7. Respond to Change

- a. Changes go to the next sprint
 - b. Be willing to change process to be more efficient
- 




8. Self-Organize

- a. Team discusses highest priority issues right away
 - b. Team doesn't wait for managers to mandate
 - c. Team agrees on actions that they can deliver
- 





9. **Focus on People**

- a. Team = safe place
 - b. Respects each other
 - c. Recognizes everyone's contribution
- 




10. Enjoy

- a. When everyone collaborates, contributes and respects
 - b. When pressure is removed from individuals
 - c. When accountability is on everyone
- 



Whole Team Approach





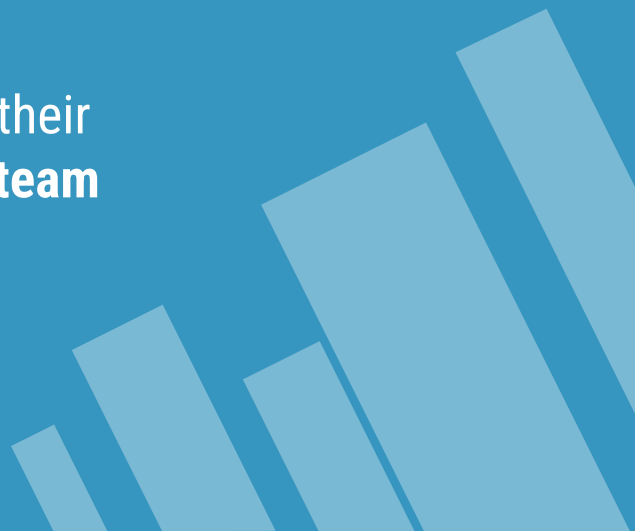
CROSS-FUNCTIONAL TEAM



Cross-Functional Team

A group of people who **do different types of work, experts in their respective fields.**

Each member of the team does ONE job, but with their collective skills, they are able to deliver what the team needs to do.

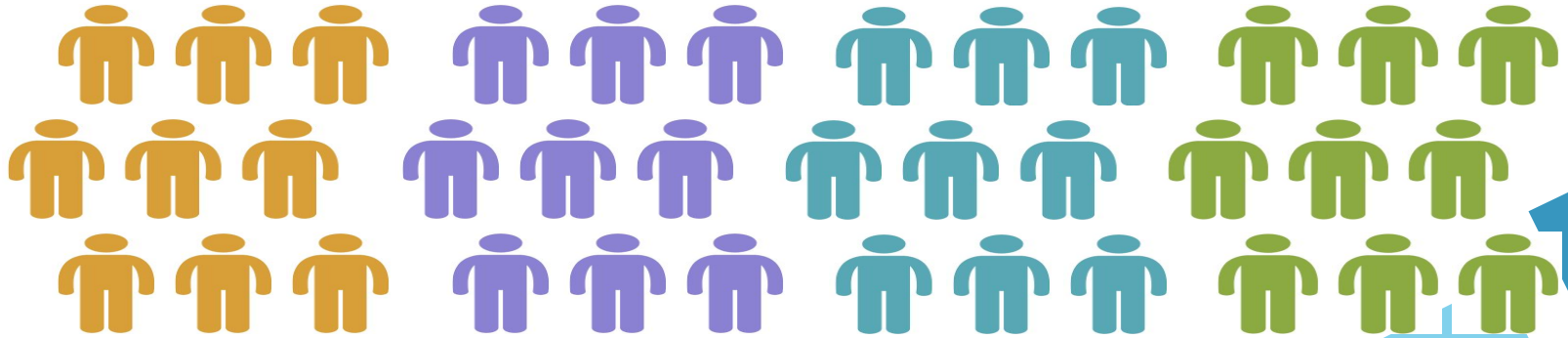


Web Dev.

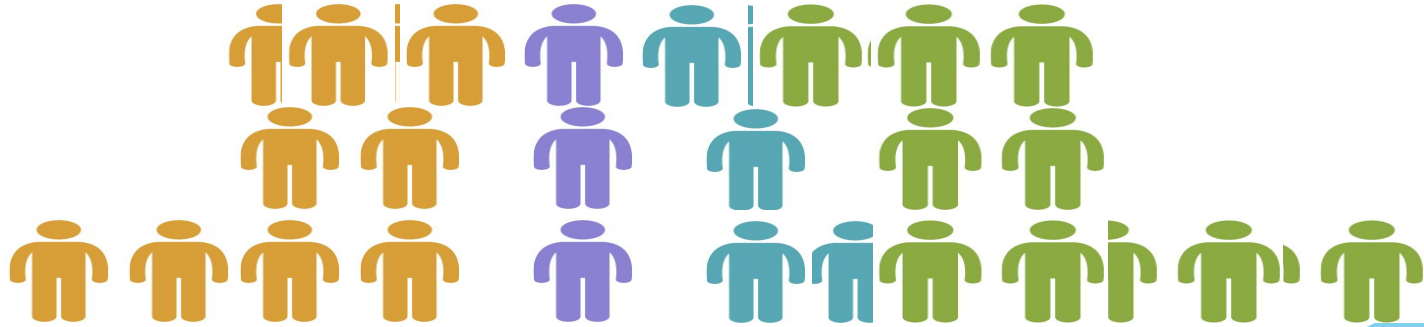
Database Admin.

Manual Tester

**Automated Test
Engr.**



Cross-functional Team (CFT)





T-SHAPED PEOPLE

T-Shaped Person

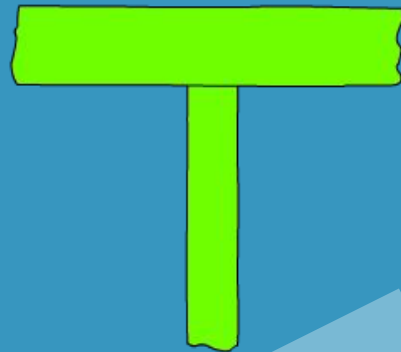
Capable in many things, expert in at least one



“I-shaped”
Expert at one thing

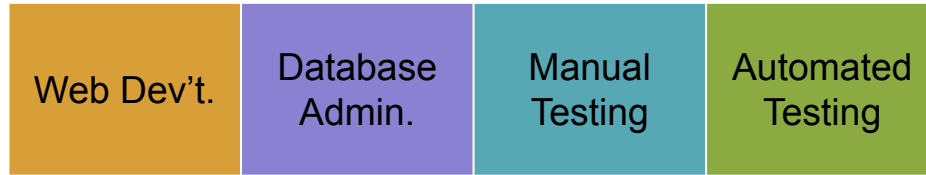


Generalist
Capable in a lot of
things, but not in
expert in any

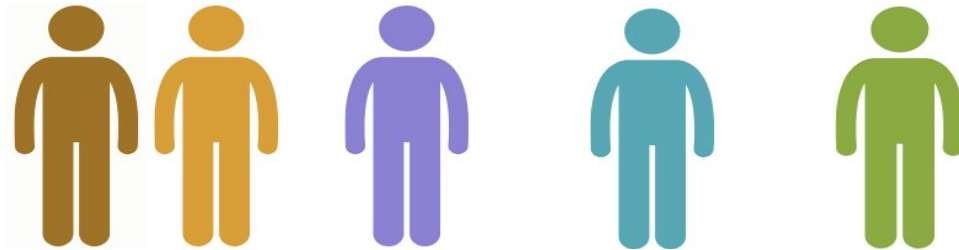


“T-shaped”
Capable in a lot of
things and expert in
one of them

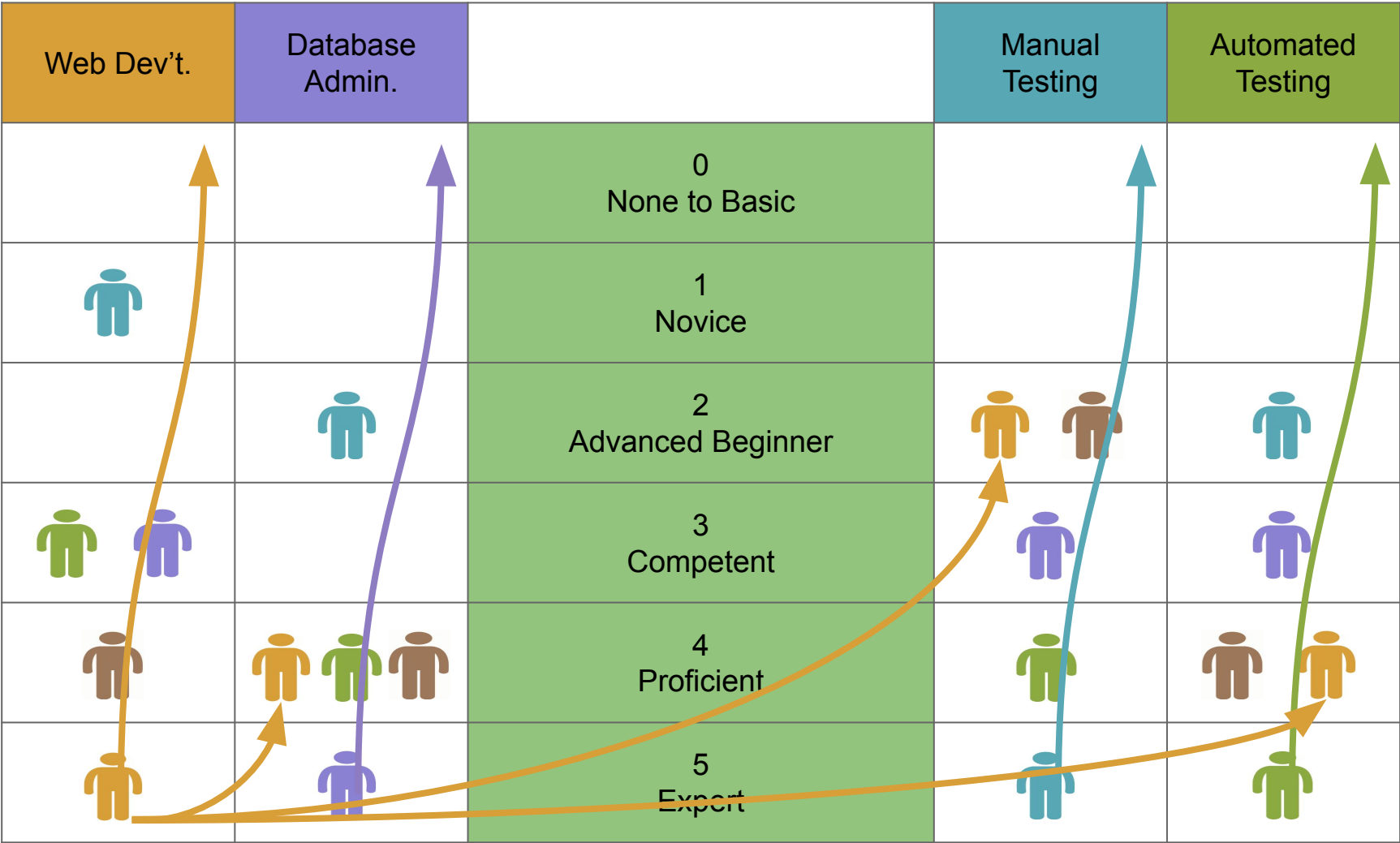
T-Shaped Team is adaptable to changing needs



Things needed to be done



Team





UTILIZING THE OR T-SHAPED TEAM

Experts to clear the bottlenecks

1



A close-up photograph of a person's finger. A silver screw is being driven into the skin by a black metal tool. The text "Non-expert" is overlaid on the upper part of the image.

Non-expert

Bottleneck























Free up the expert time by
utilizing non-experts

2



Non-experts can help with clearing bottlenecks

3

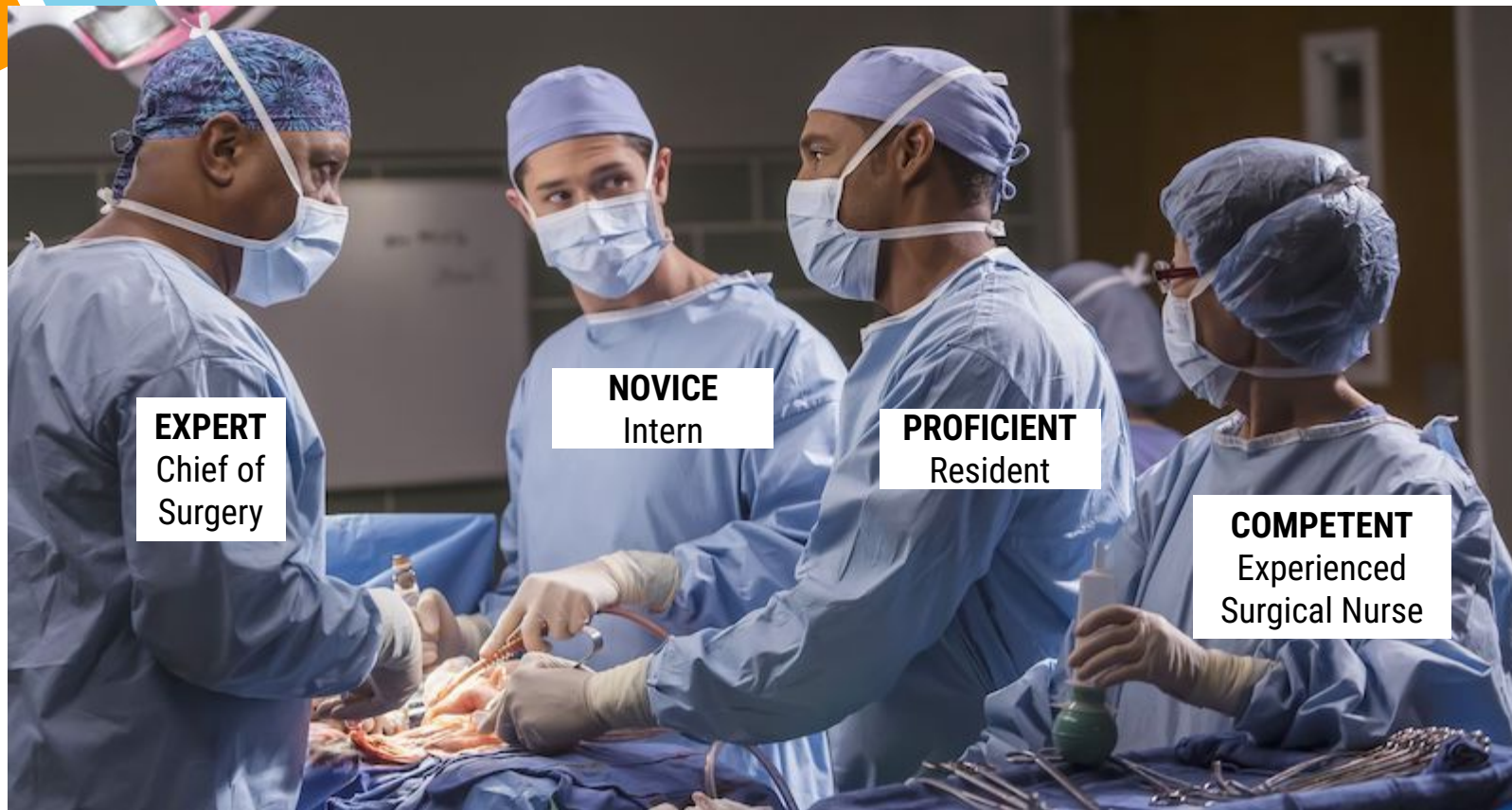
Web Dev't.	Database Admin.		Manual Testing	Automated Testing
		0 None to Basic		
		1 Novice		
		2 Advanced Beginner	 	
 		3 Competent		
	  	4 Proficient		 
		5 Expert		



Learn each other's skills to improve communication

4





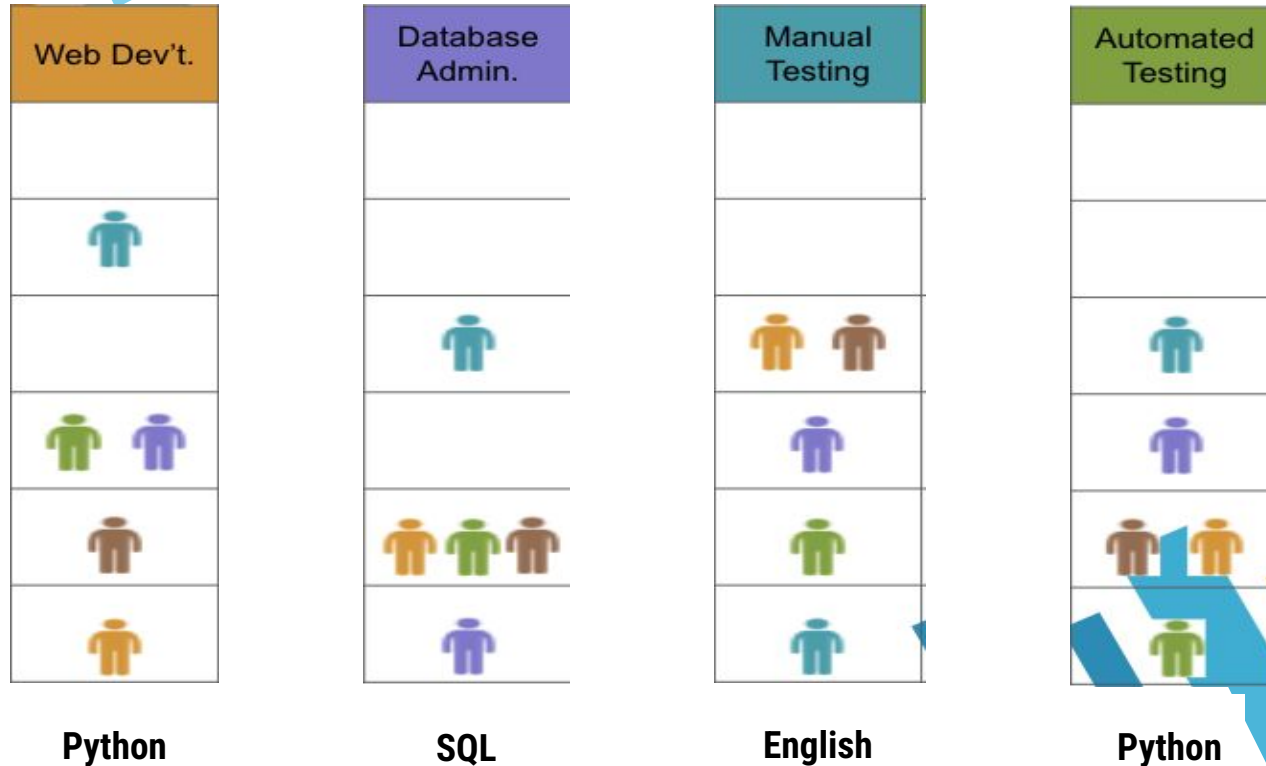
EXPERT
Chief of
Surgery

NOVICE
Intern

PROFICIENT
Resident





















COMPETENT
Experienced
Surgical Nurse

Learn each other's skills to improve communication



Being T-shaped is about being flexible

5

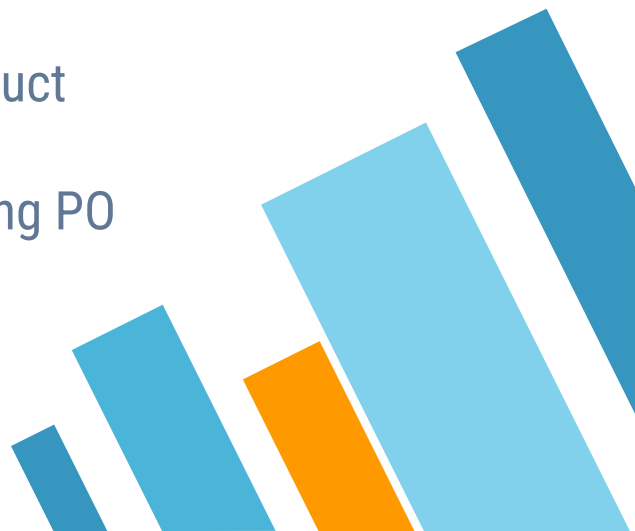
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 		3 Competent		
	  	4 Proficient		
		5 Expert		 



WHOLE TEAM APPROACH



Whole Team Approach

- Collaborative approach
 - All team members with necessary skills and knowledge will do their best
 - Including the business stakeholders and Product Owner
 - Team is relatively small (4 to 9 people including PO and ScrumMaster)
- 

Efficient Scrum Team Sizes



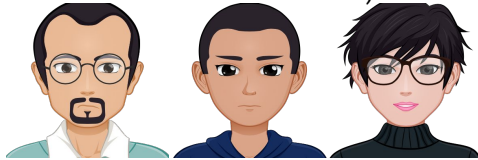
Pat (PO)

Sam
(Scrum
Master)



Pat (PO)

Sam
(Scrum
Master)



Art
(Architect)

Derrick
(Developer)

Tori
(Tester)



Art
(Architect)

Derrick
(Developer)

Tori
(Tester)

Dexter
(Developer)

5 plus or minus 4 team members
Not exceeding 9 members

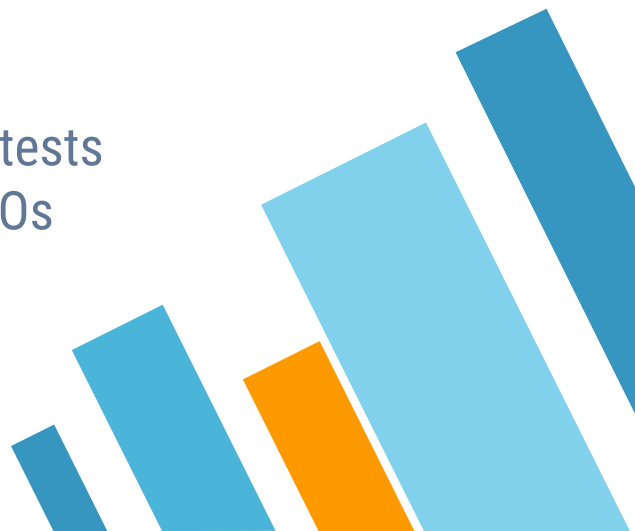


Dennis
(Developer)

Teena
(Tester)




Whole Team Approach

- Everyone is seated at the same physical location
 - Everyone attends ALL Scrum ceremonies
 - Supported by Daily Stand-up Meetings to communicate progress and impediments
 - Testers can help developers write automated tests while developers can help execute test, and POs can create and execute Exploratory and UAT
- 




Benefits of Whole Team Approach

- Enhancing communication and collaboration
 - Enabling the various skill sets within the team
 - Making quality everyone's responsibility
- 




Benefits of WTA in Agile Testing

- » Quality is incorporated all throughout the SDLC
 - » Collaborative environment allows efficiency
 - » Agile Testing permits flexibility on what can be done, when and how it can be done
 - » **Quality is a responsibility of everyone**
- 



Why Do we Need Agile Testing?

- » Early identification of defects
 - » High quality of products
 - » Easily adapt to changes
 - » Lower Risk
 - » Easy to manage
- 



Agile : ACTIVITY

1. Group into 3 members each.
 2. Share your screen and turn on your audio
 3. The team can strategize on how to solve the puzzle fast as long as everyone is contributing
 4. 3 Iterations, 60 seconds max
 5. Time each iteration
- 