Activity: Agile Airplane

Air shows have become popular spectator events. Air shows across the country have placed orders for planes, we need to fulfill them. Everyone here is part of the “Awesome Agile Aviation” Company and can coordinate in any way.

• Roles:
  • QA/testers: Need 7 QAs/testers to evaluate the product after each Sprint
  • Developers: Form 7 teams. Each team has $40 in the bank.

• Economics: The company has a fixed cost (burn rate) of $12 per team per Sprint, and revenue from accepted orders

• Coverage criteria: “Done” criteria

• Test harness: appearance matches the picture, color coding in place, fly 6ft (or 2m) over table

• 3 Sprints. After each Sprint, QA/testers will evaluate the airplanes each team produces – “accept” or “reject”

[Adapted from Agile Airplane Game, by John Heintz, GistLabs]
Agile Airplane – Sprint 1

Sprint 1 (5 minutes)

• Developers:
  • Use the provided supplies, follow the production instruction#1 to produce airplanes
  • You have 1 minute to plan Sprint
  • You have 4 minutes to run Sprint

End of Sprint 1 (2-4 minutes)

• Developers:
  • Demonstrate to QA/testers

• QA/testers:
  • If the airplanes pass the tests, accept the planes, group batches of “done” planes
  • If the airplanes fail the tests, tell the teams about acceptance criteria and reject the planes (“rip”) them
  • Pay $20 for every complete delivery of 15 airplanes (i.e., add $20 to the team financial chart)
  • Update the team financial chart with $12 burn rate
Agile Airplane – Sprint 2

Sprint 2 (5 minutes)

• Developers:
  • Use the provided supplies, follow the production instruction#2 to produce airplanes
  • You have 1 minute to reflect and plan
  • You have 4 minutes to run Sprint

End of Sprint 2 (2-4 minutes)

• Developers:
  • Demonstrate to QA/testers

• QA/testers:
  • If the airplanes pass the tests, accept the planes, group batches of “done” planes
  • If the airplanes fail the tests, tell the teams about acceptance criteria and reject the planes (“rip”) them
  • Pay $30 for every complete delivery of 10 airplanes (i.e., add $30 to the team financial chart)
  • Update the team financial chart with $12 burn rate
Sprint 3: High value / High risk (5 minutes)

- Developers:
  - Use the provided supplies, follow the production instruction#3 to produce airplanes
  - You have 1 minute to reflect and plan
  - You have 4 minutes to run Sprint

End of Sprint 3 (2-4 minutes)

- Developers:
  - Demonstrate to QA/testers

- QA/testers:
  - If the airplanes pass the tests, accept the planes, group batches of “done” planes
  - If the airplanes fail the tests, tell the teams about acceptance criteria and reject the planes ("rip") them
  - Pay $40 for every complete delivery of 5 airplanes (i.e., add $40 to the team financial chart)
  - Update the team financial chart with $12 burn rate
Activity: Wrap-up

• What aspects were applied?
• How were test harnesses used?
• How were criteria applied?
• How were acceptance tests applied?
• How likely had the quality been improved from Sprint to Sprint?