Evolve Your Testing the Pokémon Way!

Paul Grimes
my linkedin profile

R, python, javascript, shiny, dplyr, purrr, ditto, ggplot, d3, canvas, spark, sawk, pyspark, sparklyR, lodash, lazy, bootstrap, jupyter, vulpix, git, flask, numpy, pandas, feebas, scikit, pgm, bayes, h2o.ai, sparkling-water, tensorflow, keras, onyx, ekans, hadoop, scala, unity, metapod, gc, c#/c++, krebase, neo4j, hadoop.

I typically ask recruiters to point out which of these are pokemon.
Agenda

• The Pokémon Company International background
• Our Quality Strategy
• Tactical Look At Our Approach
• Outcomes
• Questions
Who Do You Work For?

• Subsidiary of The Pokémon Company in Japan
• Offices in Bellevue, WA and London, UK
• Manage Pokémon brand outside of Asia
• Play! Pokémon – organized play of the card game (TCG) and video games (VG)
• Pokémon Center (online shop)
Pokémon – What Do We Do?

• 324 million video games sold worldwide
• Card Game - 25.7 billion cards to 74 countries in 11 languages
• *Pokémon Detective Pikachu* live action movie
• 1000+ episodes of the TV show
• Pokémon GO (licensed to Niantic) – 850 million global downloads
What Does the Tech Org Do?

• Pokemon.com
• Tournament Organization
• Pokémon Trainers Club
• Digital Products
  • Pokémon Trading Card Game Online
  • Pokémon TCG Card Dex
  • Pokémon TV
The Quality Team

• Software Test Engineers, Software Development Engineers in Test and Managers reporting to a Software Quality Director

• Pods for projects (ex. Pokémon TV, Pokémon Trainers Club)

• Scrum teams for addressing quality team needs (ex. automated regression testing for Pokemon.com, creating test centric data storage)

• Recently joined with Customer Service team to have a complete view of the product from inception to post-release
Quality Strategy

• Exploratory Test Phase
• Unit Test Development
• Integration Test Development
• Performance and Stress Testing
• Release Testing and Management
Exploratory Testing

• Goals
  • Basic Functionality Review
  • Edge Case Discovery
  • Implementation Choice Evaluation
  • Handle One-offs

• Tools
  • Local Development Environment
  • Test Deployment Environments
  • Version Control Solution
  • Browser Tools
  • Postman
Unit Testing

• Goals
  • Develop/maintain code confidence
  • Consult on design

• Tools
  • Code reviews
  • Code coverage metrics
  • CICD integration
Integration Testing

• Goals
  • Create confidence in the entire system
  • Validate architecture choices

• Tools
  • Test framework
  • Correct set of tests
  • CICD integration
  • Code coverage
  • Docker
  • Test case management
  • mabl
Performance/Stress Testing

• Goals
  • Performance testing – how does system act under expected conditions
  • Stress testing – what happens outside of expected conditions
  • Validate production infrastructure

• Tools
  • Re-use your test framework if possible (should inform your framework choice)
  • Estimate user behavior
  • Monitoring
  • Load tools
  • Docker
  • AWS services
Release Testing / Management

• Goals
  • Confidence for stakeholders
  • Visibility

• Tools
  • Client test plans
  • Go / No Go process
  • Post release monitoring
  • Positive handoff
  • Checklists
Outcomes

• Product and service understanding
• Reduction in incidents
• Rapid iteration
• Customer satisfaction
What’s Next?

- Future improvements
  - Test results repository
  - True CICD
  - Services catalog
- Constant refinement
Questions?

We’re Hiring!
https://www.linkedin.com/company/pokemon/jobs/

- Docker
- Postman
- Locust
- qTest
- Jira
- Selenium
- Sealights
- AWS
- SumoLogic
- mabl
- NewRelic

- Visual Studio
- Jenkins
- TeamCity
- SonarCube
- Artifactory
- MobileLabs