Gamification in Software Testing and QA

Robert Hoischen
Producer & QA Manager, Camshaft Software
Intro - A shift to early release models

- Early Releases
  - Marketing reasons, preorder system, testing

- Community Involvement
  - Building interest for the game early

- Valuable Feedback
  - If you actually want it...

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Intro - The flexibility of the word "Beta"

- Alpha and Beta Builds
  - Are marketed differently from their definition

- Shift in Player Expectations
  - Players expect polished milestone builds

- FAAAN Betas
  - Players are in it for the fun, not the work

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Intro - Extracting playerbase talent

- **Passionate Playerbase**
  - There are plenty of people willing to help

- **Extract Their Full Potential**
  - Vast expansion of development resources

- **QA and Feedback**
  - The perfect use of passionate amateurs

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Intro - System requirements

• Challenges
  • Get quality work done "for free"
  • Coordinate wildly different individuals
  • Tester motivation and focus
  • Pull the strings without strangling
  • Maintenance and communication

• System Requirements
  • Guiding, Rewarding, Flexible, Manageable

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POMMS - Project-Oriented Modular Motivational System

- Gamified QA Project Work
  - Work => Points => Rewards in subprojects

- Point-based System - Power Level
  - One point ~15 min of effective work
  - For any task beneficial to the project

- Keeping It Simple
  - Must be understandable by mere mortals

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POMMS - Points inflation is a no-go

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POMMS - Points and rewards

- Minimum Point Requirements
  - For the tester's and developer's benefit

- Rewards
  - Credit to whom credit is due
  - Cumulative stars for top rankings in subprojects

- Carryover
  - Work does not diminish in value over time

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POMMS - Managing a QA MMO

- Quest Board
  - Prioritizes and focuses testers' work
  - Central hub for information

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Quest Announcement: Open Scenario Pre-Balancing Run 3

Quest description:
This works just like the previous prebalancing runs and is your basic scenario balance testing.

You find the balance testing spreadsheet here.

The scenarios will be horribly broken, some maybe even impossible to complete at all, others waaay too easy. This run is supposed to give us a certain foundation to start with, so don't expect a flawless experience. Having thoughts about some of the scenarios? Discuss them in the scenario discussion thread!

The scenario file you should use is the one coming with the game this time. If you find errors, please comment in the spreadsheet.

Quest volume:
12 scenarios x 8 slots each = 96 points. ~12 points maximum per tester.
Please keep double-solutions to a bare minimum and to the cases where you have REALLY GOOD and DIFFERENT solutions.

Reward:
Normal reporting. Example: Scenario Testing: (B227 R3) S1-8, S11

Quest Duration:
Lasts until enough data is available.
POMMS - Managing a QA MMO

• Tester Score Cards
  • Updated and maintained by the testers
  • Testers score their own work according to rules
  • Openly visible to all testers
  • Makes cheating more difficult than working

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Re: Beta Testing Hall of Heroes

Tester ID: Bigstank
Tester Status: ACTIVE
Current Score: 9 (+30)
Scenario Testing: None.
Pivotal Entries: None.
Engine Data: (Suggested) Hartley H1, Ford LL23 (Turbo) (Accepted) Ford LL23 (Turbo)
Engine Testing: None.
Forum Excellence: None.
Achievements: 2x Scenario Copy Paste 1p, And I scored them all 5p
POMMS - Managing a QA MMO

- Communication Hub
  - For keeping everyone up to date
  - Closed-forum discussion threads
  - Centralized and organized for efficiency

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POMMS - Why does POMMS work?

- Clear Measure of Progress
  - Single steps are easy and progress readily visible

- Clear Measure of Value to the Project
  - Independent of skills and preferences
  - Acknowledgement and credit

- Being Part of the Project
  - Gives a sense of accomplishment

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Recruiting - The ebb and flow of testers

- Finding the Right People
  - Plenty of people willing to test buggy software
  - Replace dropouts from previous subproject

- Don't Take Everyone
  - Frustration and massive waste of developer time

- Application Process
  - Investing time here pays off later

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Recruiting - Application and selection

- Appropriate Entry Thresholds
  - Be very clear on what is required from testers

- Phase 1: Who, why, experience?
  - Open application on for example the forums

- Phase 2: Two Simple Questions
  - What would you do if you find a bug?
  - What would you do if you find a balance issue?
Recruiting – Setting up new testers

- Loads of Things to Learn
  - Centralized info and guides, unlisted YouTube intro

- Timing of New Testers
  - Give new testers an easy start - RC testing

- Seasoned Tester Role Models
  - Experienced testers lead the way, set examples
Lessons - Potential pitfalls

● Unfair Quest Bias
  ● Power testers vs. solid work over many subprojects

● Dangerous Competitiveness
  ● Avoid first come first served quests

● Quantity Over Quality
  ● Very high minimum requirements for every point

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Stats - What has POMMS done so far?

- 6000 points collected (~1500h)
  - 3 Power-testers responsible for half of that

- High-Quality QA
  - Specialized testers are very valuable

- QA Productivity Improvement
  - ~10x compared to an unstructured closed beta

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Stats - Small to large, yes it works

- Simple Tools Good Enough
  - Google Docs, Forum, Teamspeak, Chat

- Efficient
  - Managing 30 testers takes ~1/4 full time work

- Scalability of POMMS
  - Easy for up to ~100 testers without automated tools

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Wrap-Up - Gamified success

1. Make a game
2. Gamify QA
3. ???
4. Profit!

More about POMMS:

Making Games Magazine 3/2013: "Gamification in Software Testing and QA"
Gamasutra.com: "POMMS: A Way to Get Your Players to Test Your Game!"

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