

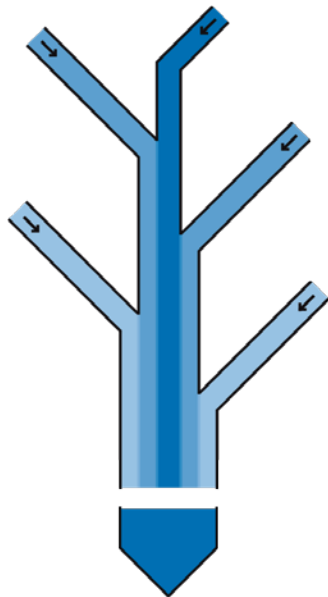
# Gamification in Software Testing and QA

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**AUTOMATION**  
THE CAR COMPANY TYCOON GAME

# Overview



Intro – The Why

POMMS – The How

Recruiting – The Who

Important Lessons

Some Stats & Wrap-Up

# 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...

# 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

# 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

# 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



# 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

# POMMS - Points inflation is a no-go





# 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

# POMMS - Managing a QA MMO

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

## 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

**Bigstank**

Official Tester



Posts: 39

Joined: Tue Sep 06, 2011  
4:36 pm

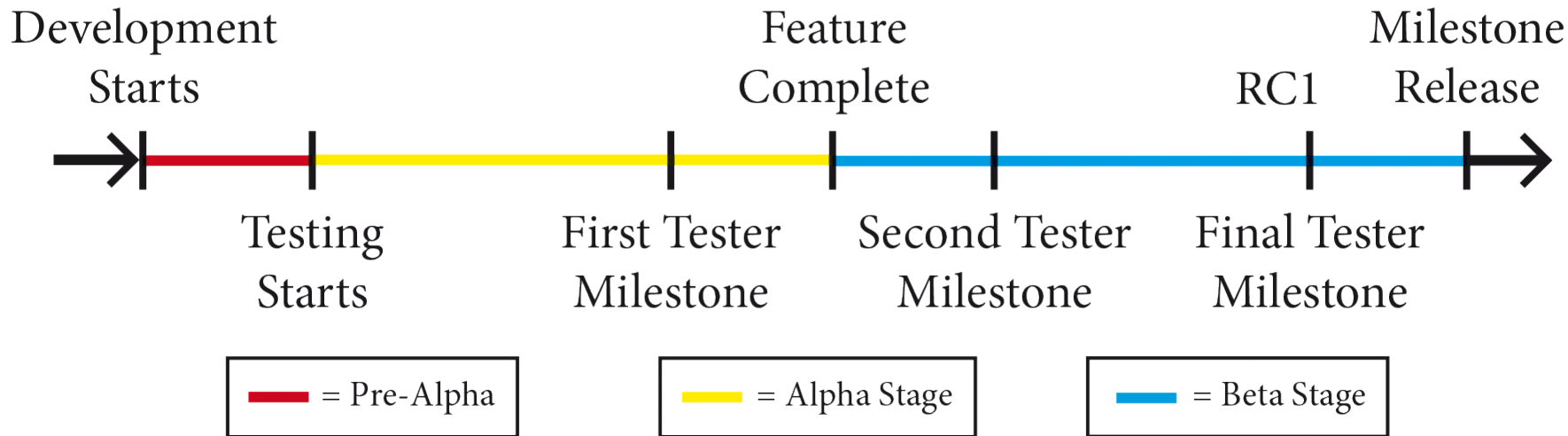
Cars: 1990 Probe GT

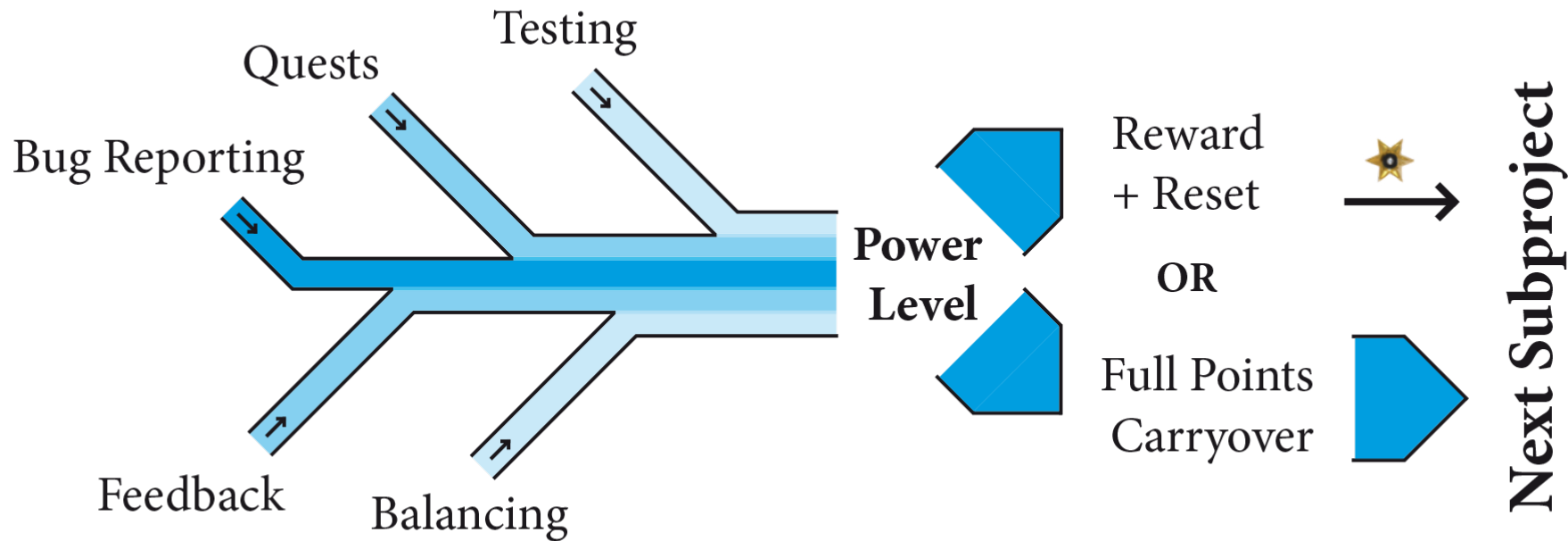
**Re: Beta Testing Hall of Heroes****Tester ID:** Bigstank**Tester Status:** ACTIVE**Current Score:** 9 (+30)**Scenario Testing:** None.**Pivotal Entries:** None.**Engine Data:** (Suggested) Hartley H1, Ford LL23 (Turbo) (Accepted) Ford LL23 (Turbo)**Engine Testing:** None.**Forum Excellence:** None.**Achievements:** 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

# The Subproject Timeline







# 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

# 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

# Recruiting - Application and selection

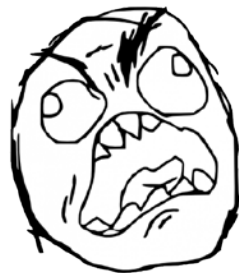
- Appropriate Entry Thresholds
  - Be very clear on what is required from testers
- Phase 1: Who, why, experience?
  - Open application on for example the forums
- Phase 2: Two Simple Questions
  - What would you do if you find a bug?
  - What would you do if you find a balance issue?

# 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



# 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

	Forum ID	Cur. Status	Removable	Stars	Revamp & 16s				Turbos & Testmode				Engine Designer Clean-Up				
					Status	Warnings	Start PL	End PL	Status	Warnings	Start PL	End PL	Status	Warnings	Start PL	End PL	
<b>Devs</b>	Dafflyer	Developer	No	N/A													
	Killrob	Developer	No	N/A													
	nortala	Developer	No	N/A													
	T16	Assist	No	N/A													
	zeussy	Developer	No	N/A													
	7drv3r7	Active	Yes	7	Active		(+0)	502	Active		(+0)	108	Active		(+0)		17
	Der Bayer	Active	Yes	7	Active		(+0)	400	Active		(+0)	606	Active		(+0)		118
	pyrlx	Active	Yes	7	Active		(+0)	406	Active		(+0)	401	Active		(+0)		78
	Kubboz	Active	Yes	4	Active		(+0)	77	Active		(+0)	45	Active		(+45)		86
	Slim Jim	Active	Yes	3	Active		(+0)	143	Active		(+0)	97	Active		(+0)		16
	1224	Active	Yes	2					RC Tester		(+0)	55	Active		(+55)		144
	adamd	Active	Yes	2					Active		(+0)	165	Active		(+0)		25
	BiotecVirus	Retired	Yes	1	Retired		(+0)	12	Retired		(+12)	12	Retired		(+12)		
	Immi	Retired	Yes	1					Active		(+0)	51	Retired		(+0)		
	Leonardo9613	Active	Yes	1					RC Tester		(+0)	52	Active		(+52)		139
<b>Beta Testers</b>	machael	Active	Yes	1	Active	Failed Active	(+0)	34	Active		(+0)	43	Active		(+43)		72
	SnipeUOut	Retired	Yes	1					Active		(+0)	60	Retired		(+0)		
	Water77	Active	Yes	1					Active		(+0)	67	Active		(+0)		40
	Cookie	Active	Yes	0					Active		(+0)	45	Active		(+45)		70
	Coolghost	Active	Yes	0					RC Tester		(+0)	26	Active		(+26)		44
	fordford	Forum Only	Yes	0	Active	Failed Active	(+25)	74	Retired				Forum Only				
	JeffreyCor	Active	Yes	0					RC Tester		(+0)	13	Active		(+13)		44
	Napoleon198905	Active	Yes	0				1623	RC Tester		(+0)	21	Active		(+21)		45
	ola	Active	Yes	0													
	paullyp707	Active	Yes	0					RC Tester		(+0)	22	Active		(+22)		69
	RenoWrench	Active	Yes	0					Active		(+0)	48	Active	Failed Active	(+48)		56
	snoman	Passive*	Yes	0					RC Tester		(+0)	44	Passive*		(+44)		44
	WizzyThaMan	Active	Yes	0								1981					681
	armandkat	Spanish	Yes	0													
	calicoe	Spanish	Yes	0					Passive*		(+0)	32	Passive*		(+32)		73
	caswal	Passive	No	N/A													
	Caswal test	Passive	No	N/A													
	designerwatts	Passive	No	N/A													
	doddy39	Passive	No	N/A													
	Felicia	Passive	No	N/A													
	JD AutoWorx	Passive	No	N/A													
<b>Press &amp; Others</b>	Lloyd	Passive	No	N/A													
	Imoreno	Passive	No	N/A													
	PlaysGames11	French	Yes	0									Translator		(+0)		
	Bourinov	French	Yes	0									Translator		(+0)		
	Shaun-SRT	Passive	No	N/A													
	SonorySound	Passive	No	N/A													
	Sorensor	Passive	No	N/A													
	SpaekKow	Passive	No	N/A													

# 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



# 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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