


AUTOMATED TESTING

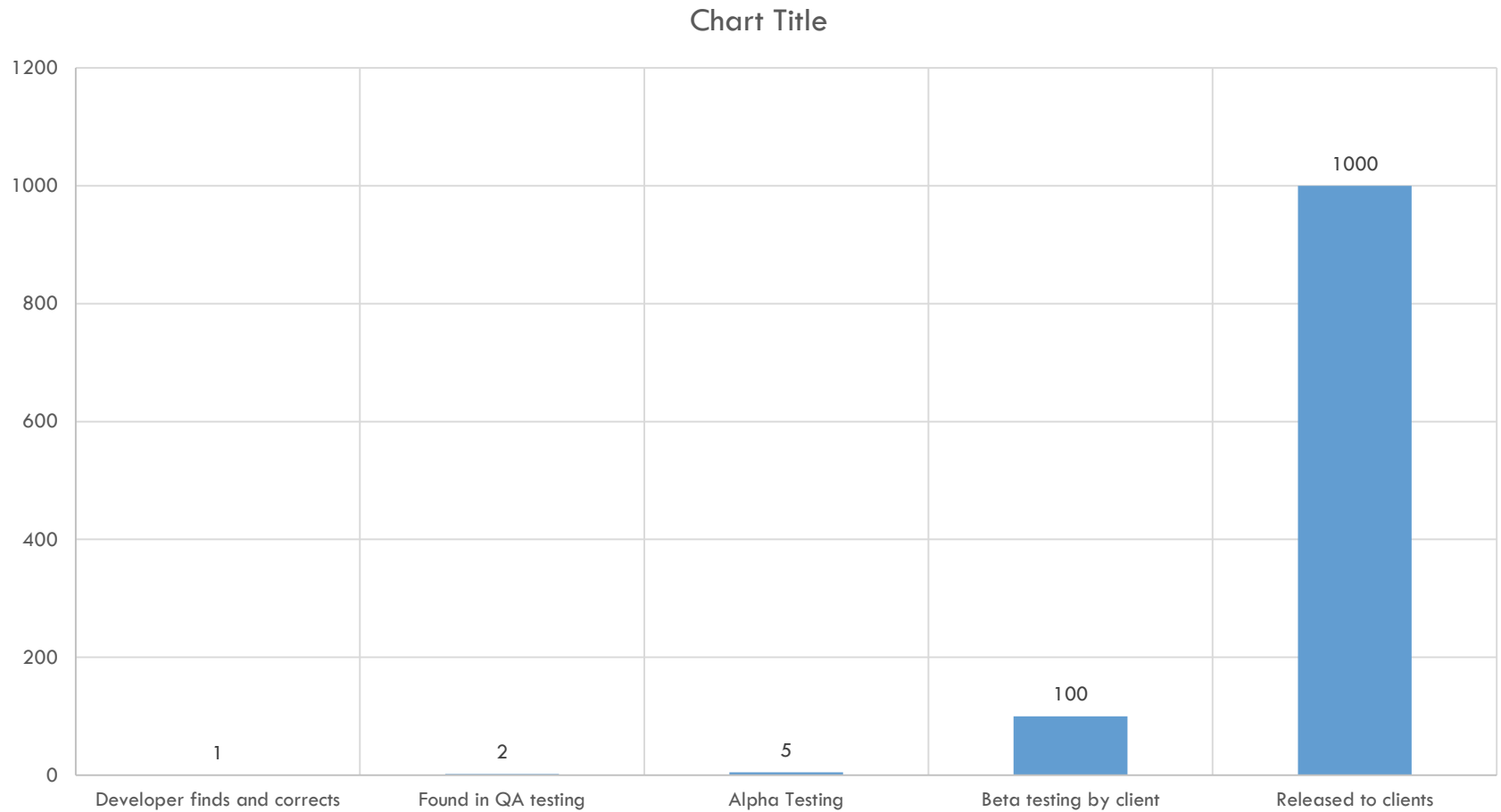
About Me

- Joe Walling
- 25+ years industry experience
- Walling Info Systems LLC The logo for Walling Info Systems features a stylized human figure composed of colorful puzzle pieces (yellow, red, green, blue) with a blue gear-like shape above its head. The text "Walling Info Systems" is positioned to the right of the graphic.
- Greenville Spartanburg Developers Guild

Overview

- Why important
- Explanation of automated testing
- How to justify
- Some tools

Cost of Bugs



Factors in Cost

- Time for developer to fix
- Number of people involved
 - Dev
 - QA
 - Client – multiple people
 - Managers from both organizations
- Cost to correct issue
- Interruption of normal development cycle
- Ill will generated
- Cost of lost customers

QA Process

- Wide variety of processes
- A good process will include all of the following
 - ▣ QA is involved from the beginning
 - ▣ Dev creates unit tests in development
 - ▣ QA tests features manually
 - ▣ QA creates automated tests
 - ▣ Regression tests run on every build
 - ▣ Before release (after coding ended) all key features manually tested

Automation

- CI Builds
- Gated Check-ins
- Database updated to appropriate version
- Deployment to QA servers
- Deployment to production servers
- Unit tests
- Regression testing

Build Process

- On check-ins, the system should automatically check
 - Code builds successfully
 - Unit tests run successfully
 - Check-in notes filled in and tied to features/issues
 - Before QA can get a build auto tests get run
 - QA should be able to request a new build and get latest good build at any time.

Automated Test Tools

- Test Complete
- QA Wizard
- Selenium
- Watin
- Macro tools – don't even consider
- Higher end more expensive and complex tools like Silk Test, WinRunner, QTP, etc...

Promise vs Reality

- Record macros, no code needed
- Reality \Rightarrow Not true

Why Code Needed

- Many similar tests
- When tests break

Why Tests Break

- Bug in software
- Intentional code change
- Bad test

What to Watch Out For

- Tests based on specific mouse location
- Menu clicks
- Good coordination between QA and Dev

Who to Put in Role

- Experience doing automated tests
- Beginning developer

- This is not for those who don't want to learn to do some coding

Contact Info & Notes

- Email: jwalling@wallingis.com
- I will post the slides on wallingis.com when I get back this afternoon.
- I will also make an “Audit Form” available to you at <http://wallingis.com/uwit-audit-form>