Painless Bug Tracking

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Reference

- http://www.joelonsoftware.com/articles/fogoooo000029.html
Painless Bug Tracking

- “At any given time, I can only remember two bugs.”
- “Keeping a database of bugs is one of the hallmarks of a good software team.”
- “… without an organized database listing all known bugs in the code, you are simply going to ship low quality code.”
Every good bug report needs exactly three things

- Steps to reproduce,
- What you expected to see, and
- What you saw instead.
<table>
<thead>
<tr>
<th>ID</th>
<th>1203</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>Bee Flogger 2.0</td>
</tr>
<tr>
<td>Area</td>
<td>FTP Client</td>
</tr>
<tr>
<td>Title</td>
<td>Uploading file causes FTP server to dump core</td>
</tr>
<tr>
<td>Assigned To</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Status</td>
<td>CLOSED (RESOLVED - FIXED)</td>
</tr>
<tr>
<td>Priority</td>
<td>2 - Must Fix</td>
</tr>
<tr>
<td>Fix For</td>
<td>2.0 Alpha</td>
</tr>
<tr>
<td>Version</td>
<td>Build 2019</td>
</tr>
<tr>
<td>Computer</td>
<td>Jill's iMac, Mac OS 9.0, 128M RAM, 1024x768 millions of colors</td>
</tr>
</tbody>
</table>

**Description**

11/1/2000 Opened by Jill the Very, Very Good Tester * Start Bee Flogger
* Create an unnamed document simply containing the letter "a"
* Click on the FTP button on the toolbar
* Try to ftp to your server

BUG: Observe; the ftp server is no longer responding. Indeed ps -augx shows that it is not even running and there is a core dump in /.

EXPECTED: No crash 11/1/2000 Assigned to Willie the Lead Developer by Jill the Very, Very Good Tester
11/2/2000 (Yesterday) RESOLVED - WON'T FIX by Willie the Lead Developer
Not our code, Jill, that's just proftpd which comes with Linux.

11/2/2000 (Yesterday) Reactivated (assigned to Willie the Lead Developer) by Jill the Very, Very Good Tester
That doesn't sound right. I've never been able to crash proftpd when I connect with a normal ftp client. Our code crashes it every single time. Ftp servers don't just "crash".
11/3/2000 (Today) Assigned to Mikey the Programmer by Willie the Lead Developer
Mikey, can you look at this? Maybe your client code is doing something wrong.

11/3/2000 (Today) RESOLVED - FIXED by Mikey the Programmer
I think I was passing the user name instead of the password or something...

11/3/2000 (Today) Reactivated (assigned to Mikey the Programmer) by Jill the Very, Very Good Tester
Still happens in Build 2021.

11/3/2000 (Today) Edited by Mikey the Programmer
Whoa. That's strange. Lemme debug this.

11/3/2000 (Today) Edited by Mikey the Programmer
I'm thinking it might be MikeyStrCpy()...

11/3/2000 (Today) RESOLVED - FIXED by Mikey the Programmer
Ahhh!
FIXED!

11/3/2000 (Today) Closed by Jill the Very, Very Good Tester
Appears fixed in build 2022, so I'll go ahead and close this.
Ten tips

- Reduce the repro steps to the *minimal steps*
- The only person who can *close* a bug is the person who *opened it* in the first place. Anyone can *resolve* it, but only the person who saw the bug can really be sure that what they saw is fixed.
- There are many ways to resolve a bug. For example: *fixed, won't fix, postponed, not repro, duplicate, or by design.*
- *Not Repro* means that nobody could ever *reproduce the bug*. Programmers often use this when the bug report is missing the repro steps.
- You'll want to keep careful track of versions.
Ten tips

- If you're a programmer, and you're having trouble getting testers to use the bug database, just *don't accept bug reports by any other method*. If your testers are used to sending you email with bug reports, just bounce the emails back to them with a brief message: "please put this in the bug database. I can't keep track of emails."

- If you're a tester, and you're having trouble getting programmers to use the bug database, just *don't tell them about bugs* - put them in the database and let the database email them.

- If you're a programmer, and only some of your colleagues use the bug database, just start assigning them bugs in the database. Eventually they'll get the hint.
Ten tips

- **If you're a manager**, and nobody seems to be using the bug database that you installed at great expense, start assigning new features to people using bugs. A bug database is also a great "unimplemented feature" database, too.

- **Avoid the temptation to add new fields to the bug database.** For the bug database to work, everybody needs to use it, and if entering bugs "formally" is too much work, people will go *around* the bug database.