unique value-add, or notable features for each tool

### Continuous Integration Tool: Apache Gump & Buildbot

**Gump** - Unique Value Added & Features to Explain to Boss: It builds and compiles software against the latest development versions of those projects. This allows the tool to monitor and detect incompatible changes to software.

**Buildbot** - Unique Value Added & Features to Explain to Boss: Allows the running of the builds on a variety of OS. It is a lightweight substitute to Tinderbox. It supports software configuration management such as Git. CI, CD, Release Management, & other processes. Offers flexible integrations with version-control systems and status reporting

# **Real Time Error Monitoring Tool**:

**Raygun** - Unique Value Added & Features to Explain to Boss: User friendly tool that gives you options to perform actions on insights into the errors and crashes that impact the user. It monitors your stack in real-time from client to server side. You can see the exact line of code that caused an error. Easy to setup. Filter through errors.

# **Getting Started:**

**Gump:** For this tool I found it difficult to get started. There weren't clear instructions on where to start. I think since it is open source that it is not as well laid out as some other CI tools. Of course there are a ton of videos explaining how to get started from other sources that will help you get started. I couldn't find a sandbox for this tool.

### Get Started:

- https://svn.apache.org/repos/asf/gump/
- Select desired options from the link above.
- Tutorial Video: <a href="https://www.youtube.com/watch?v=Q8C0LJPpr64">https://www.youtube.com/watch?v=Q8C0LJPpr64</a>

**Raygun:** This tool is more user friendly. Since it is a paid-for-tool there are detailed docs and instructions on how to use the tool and get started.

### Getting Started:

- Navigate to <a href="https://raygun.com/">https://raygun.com/</a>
- Select desired product
- Either start free trial or purchase the product

Gump: is an open source tool. I can't find the age of the tool based on the website or from google. Gump does not have a github to display latest commits, however on their website the tool comments up to 4 times a day. No mentions of companies who use gump.

Raygun: Raygun is a company that has between 11-50 employees. Their github is updated regularly. The earliest commit was yesterday. Other companies that use the tool: Cocacola, Dominos, Target, Peloton, Microsoft.