**System Request**: Bug Tracking Software Application

**Business Needs**: A software bug tracking application has been initiated to improve the quality of software employees use in their workplace and therefore improve productivity. It provides a platform where both software developers and users of their software can communicate and together reduce the number of bugs in business software.

**Business Requirements:**

Base users of the system are employees of a company who have Bug Tracker installed. They are known as Reporters and use the software to report bugs they encounter while using company software. A reporter has the following functionalities available to them:

* Register to gain access to the profile subsystem and Bug Report subsystem. Once registered they will have access via a log in form.
* Create and edit their profile.
* Report a bug.
* Comment on any bug reported.
* Register to a bug, to receive notifications and updates.
* Gain reputation points for reporting good bugs.
* Search for existing bugs.
* Search for other users of the site and view their comments and reported bugs.

Level 2 user is a Reviewer, otherwise known as a tester. Reviewers test applications once they have been updated. Reviewers have the same functionality as base users as well as:

* View a list of fixed bugs.
* Record the outcome of testing via comments

Level 3 user is a Developer who has all functionality of a Reporter and Reviewer as well as:

* View a list of bugs to fix.
* Check a bug in or out to move it to a new status.
* Ability to communicate with Triagers on the progress of a fix.

Level 4 user is a Triager, who uses the system to monitor the life-cycle of bugs by assigning bugs to developers to fix and creating statistical data on bugs reported. They have all functionality of a Developer, as well as:

* Assign bugs to developers
* Check for duplicates/invalid bugs
* Produce bug reports
* Edit existing bugs
* View developers current assigned bug list
* Disable/enable a user account.

Level 5 user is a Systems Administrator who is the super-user and maintains the system. They have all the functionality of all other users as well as:

* Import user profiles
* Add new users
* Remove existing users
* Edit existing user profiles
* Enable/disable user accounts

**Business Value:**

It’s expected Bug Tracker will improve the quality of business software by reducing the number of problems employees encounter while using it. This will be particularly noticeable within companies using complex software applications that are critical to their day-to-day business. Conservative predictions show an 80% improvement in the quality of software applications resulting in a 30% increase in work-place productivity and accuracy.

Estimates of tangible value to a medium sized company include:

$50,000 yearly reduction in help desk calls related to software bugs.

$100,000 yearly increase in productivity due to faster, better quality software.

**Special Issues or Constraints:**

* The system will integrate into a company’s existing IT department and network if they have one and be run by IT management. Otherwise it can be run externally by Bug Tracker staff via a VPN internet connection.