**Defect Tracking for Improving Product Quality and Productivity**

**Objective:**

Defect Tracking for Improving Product Quality and Productivity for Improving Software Reliability is an automated system that can be useful to employees and the managers in any functional organization. Defect Tracking for Improving Product Quality and Productivity gives the facility to define the tasks in the organization and also allows the managers to track the Defects spent by the developer for that particular task. A report generation facility is supported in DTS that allows the managers to analyze which are those skills by employee are utilized and those which are not utilized. project or application. This tool helps employees to document their Defects and analyze.

**Existing System :**

* The existing system consists of entering the details in the Microsoft Excel Sheets for the storing of the data.
* When a manager needs information of the employee he searches for the specified file in the file system.
* He opens the file and takes the information. Report Generation done manually by copying the content of the different files into another file. The Manually generated report was then printed.

**Limitations in Existing System**

* Information retrieval is a very big process.
* Lack of organization of the files may porn to information loss due to accidental deletion of files.
* No security because the files are visible to the users.
* Report generation will be a big task.

**Proposed System**

The Proposed system is a browser which is completely related to online system, which provides the centralized database. It stores Defects data and description of the particular Defect data. It can also create reports and documents based on the information in its database.

**Advantages over Existing System**

* The performance is increased due to well designed database.
* Security is increased
* Time saving in report generation
* Easy to update the details

**Modules:**

* **Admin:** This module has the entire access to all other modules, admin creates the project and assigning the projects to the created manager, adding members to the managers, assigning Defects based on the priority. Can update the manager, members and access to the particular project data. Generating reports based on the managers report submission.
* **Manager:** Manager has the full access to the particular project assigned by the admin and controls the team members access to the Defects assigned. Has the permission to generate the reports and update the information of team members and adding members to the project.
* **Developer:** Can access the task or Defect assigned by the manager, view assigned projects and resolving the assigned Defect. Developer can view the Defects list assigned by the manager.
* **Tester:** Tester can access to the projects , can view the assigned projects and can add a new Defect to the list and send the bug back to the manager. Tester can login to the system and access the assigned projects list.
* **Reports:** Both Admin and Manager can access this module and generate the reports based on the requirements.
* **Software Requirements**
* Operating System : Windows XP/2003 or Linux/Solaris
* User Interface : HTML, CSS
* Client-side Scripting : JavaScript
* Programming Language : Java
* Web Applications : JDBC, JNDI, Servlets, JSP
* IDE/Workbench : MyEclipse8.6
* Database : Oracle10G
* Server Deployment : Tomcat6.0
* **Hardware Requirements**
* Processor : Pentium IV
* Hard Disk : 40GB
* RAM : 256MB