

Team ID: *Best IDE*

Shrikanth

Dennis

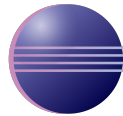
Babbage

Projects being studied

1. Netbeans IDE



2. Eclipse IDE



- ❖ Eclipse and Netbeans are two top of the line Integrated Development environments (IDEs) for Java development.
- ❖ We provide an *analysis* and *comparison* for the **usability**, **performance** and **stability** of Eclipse and Netbeans on the three most commonly used operating systems, Windows, Linux and Mac OS.

Milestones and focus leaders

9 October: Data collection and preliminary results

30 October: Infrastructure setup with deep dive comparison

15 November: Analysing the results

1 December: Reporting both fruitful and vague findings

Shrikanth leading data collection and comparison metrics with Windows

Dennis leading data cleaning and comparison metrics with Linux

Babbage leading infrastructure setup and comparison metrics with Mac OS

Tools being used

- ❖ **GUI recorders** to compare eclipse and netbeans usability across the three operating systems.
- ❖ **JMeter** to measure performance of commonly used features.
- ❖ **Findbugs & Spotbugs** for static code analysis on eclipse and netbeans.
- ❖ **Other : Bugzilla, Custom Scripts, R statistical package/Weka** library to analyze already reported project bugs.

Metrics

- **Usability** : System usability scale.
- **Performance**: Time taken for frequently used common features, load/stress and concurrent user support.
- **Stability** : % of high priority bugs (overall and platform specific), % of re-open rate (overall and platform specific) and Bug turn around time

Preliminary results

Already reported bugs :

Suggests that Eclipse has reached a relatively stable stage on Windows after 2005.

Reason : The number of bugs on Windows gets sharply increased in 2004 and 2005 and then gets stabilized after that. On Linux and Mac, the number of bugs is fairly stable, but increasing slowly up to 2008.

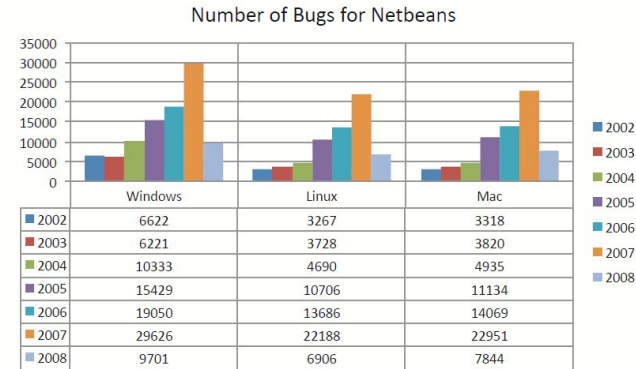
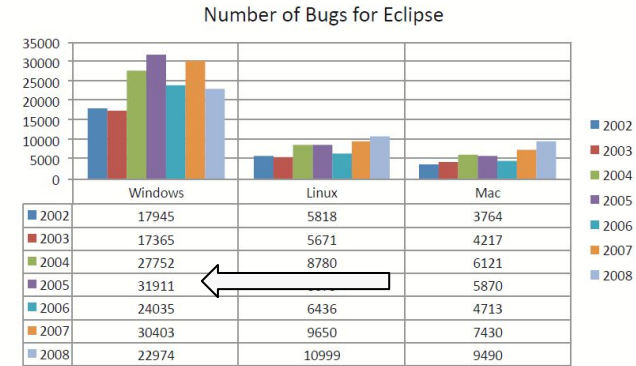


Figure 1: Number of Bugs Reported on Different OS's over Time

Midterm Presentation guidelines (1/2)

- ❖ A slide **template**/format for the entire class will be provided.
- ❖ **No** additional slides, have the same slide TITLES, in the SAME ORDER as the template.
- ❖ Students are **encouraged** to use graphics and project logos. And they can use more color/images/style than the example in the template.

Midterm Presentation guidelines (2/2)

- ❖ **Random**, order will be announced during first few mins of class.
- ❖ Students in the audience will be asked to **rate** each presentation on Clarity, Technical accuracy, Ambition, and their level of Interest in seeing the results of that project.
- ❖ Grades for presentations will include teaching staff ratings and peer ratings.