Enterprise Computing: Bridging the gap to Generation-Y with RDz and LINUX Web

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Generation Y

- Gen-Y born between 1980-1995
- Gen-Y Students:
  - Have grown up using technology
  - Use technology differently than Boomer generation
  - Use different technology

Gen Y Technology Usage

- Gen-Y spend more time online, watch less TV, engage in more social computing activities, such as instant messaging; and use more social networking sites like MySpace than any other generation, Forrester Research Inc. said.

- "(Older consumers) tend to use the new technology to do old things," Forrester analyst Ted Schadler said. "Younger consumers use the new technology to do new things."
  - 45% of Gen-Y use data services with Cell Phones
  - 27% of Gen-X use data services with Cell Phones
  - 14% of Boomers use data services with Cell phones
Generation-Y Learning Styles

- Gen-Y Students are (1):
  - Visual, creative, self-directed
  - Become impatient more quickly
  - Efficient multi-taskers
  - Need IMMEDIATE feedback on their Actions
  - Tech-Savvy
  - Image-driven (want to put their own stamp on things)

- Long Procedural Exercises no longer suit Gen-Y learning Style.

How to address Learning Style Differences in Enterprise Computing Curriculum?

- Rational Developer for System z
- Linux Web Development
What is Rational Developer for System z?

- IBM’s Software Development Environment for the z-Series Mainframe
- Facility to build, manage and deploy software
  - GUI Based
  - Multiple Views and Perspectives for multitasking
  - Immediate feedback on syntax problems
  - Helps students understand inter-relationships in the mainframe environment
ISPF based Development

- submit compile job → swap to SDSF
- edit JCL
- exit source
- change code
- find code line
- edit source
- exit JCL

- select job
- find error msg
- find code line
  (remember error)
- swap to edit
  session

- Multiple screens/sessions and multiple disparate tools
- 20 x 80 characters of content
Rational Developer for System z

- Programmer can simultaneously:
  - Debug a COBOL Program
  - Create a data table in DB2
  - Browse local files and PDS
  - Run SQL against DB2
  - Check their JES output

Rational Developer uses Views and Perspectives to Organize Development Work
LINUX Web Development

- Gen-Y have more personal relationship with various types of media—video, audio, graphics (Gardner & Eng, 2005)
- Gen-Y are image driven, they want to put their own stamp on things (NAS, 2006)
- Gen-Y use technology in a social/community environment (McManus, 2004)

- Incorporate Multiple Web Development projects on Linux Web hosted on IBM z900
- Projects are based around general guidelines allowing the individual or group to develop their own themes
- One project, students had to “dress to fit their theme”
Project Example: Santa’s Christmas Bookshop

Example Project: Scrubs-4-Less

URL: http://130.184.27.19:1080/~uoas028/uoas028scrubs/mailman.html
Example Project: Top Gear

First Gear Episode Guide
Web Application

<table>
<thead>
<tr>
<th>Episode ID</th>
<th>Season</th>
<th>Episode</th>
<th>Airdate</th>
<th>Features</th>
<th>Cameo</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>4</td>
<td>2</td>
<td>23 May 2004</td>
<td>Porsche 911 GT3, Ferrari 360, 1968 Dodge Charger, Audi 80 1.8E, Rover 416GTi</td>
<td>Jordan</td>
<td>The best car for £100</td>
</tr>
</tbody>
</table>

http://130.184.27.19:1080/~uoas017/firstgear/index.html
Conclusion

- Continue to improve our LINUX development environment

- Curriculum Development Initiative for Transaction Processing Class using RDz.

- Enrollments have grown from 5 students to over 50 students, 2 sections