

Final Report

Project Title: EarthWare!

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PROJECT GOAL:

The project goal was to provide visual and text messages on Earth conservation in the format of a screensaver for Microsoft Windows and Apple Macintosh computers that SUI could distribute on the campuses of the University of South Carolina.

OBJECTIVES:

- i. To develop text and visual content in support of sustainable development, primarily at the University of South Carolina.
- ii. To secure software to develop the final product; and to employ students to build contents for Windows and Macintosh computers.
- iii. To research the effectiveness and appropriateness of screensavers on devices with energy-saving capabilities, on new operating systems.
- iv. To define system requirements for end-user computers.
- v. To identify potential deployment, licensing, and Web distribution of the final product.

PROJECT ANALYSIS:

Research findings.

- Both computing platforms have introduced new operating systems with significant improvements, and have required upgraded hardware to run.
- Web technologies have standardized over a matured set of technologies for efficiently and effectively delivering multimedia content.
- Several locations, individuals or groups at the University of South Carolina can provide data or content for the project, including pictures of the CLA Computing and Information Technology Center laboratories, campus scenes, USC Facilities Services data and plans, and USC Housing.
- As a global resource, the United Nations has significantly updated its website with sustainable development data and resources.
<http://www.un.org/esa/agenda21/natinfo/agenda21/issue/sdissue.htm>).
- The use of the Web to deliver content to the desktop has become commonplace. End-users can now comfortably maneuver a short set of installation instructions without special or advanced assistance.
- Nearly screensaver development kits are no longer effective and the products ScreenTime for Flash, ScreenTime for PowerPoint, and ScreenTime for QuickTime allowed greater flexibility for content type and quality as well as interoperability across computing platforms. These products also allowed screensavers to be included within presentations and websites. Such capabilities presented new opportunities to deliver

sustainable development/SUI messages in broad contexts without interfering with energy-saving features and new hardware and software. When we speak of new opportunities we mean

- the ability to deliver the screensaver content in Microsoft PowerPoint presentations and to exhibit it in Macromedia Flash movies, for both computing platforms and the Web;
 - the ability to display an exciting new logo image for publishing to print and virtual media, including t-shirts and other commodities;
 - the ScreenTime software allows thousands of distribution licenses, which can be monitor on the Web; and
 - the specifications for ScreenTime software help define specifications for EarthWare.
- EarthWare products have run successfully on all targeted platforms for the past two months without incident: “frozen” computer screens or hard drives, virus attacks, license abuse, or “hiccups”. These findings address early concerns of and resistance from local IT support units.
 - All of the above enhance the project’s ability to achieve success.

Project Innovations. The innovations of this project include the below.

1. *EarthWare Logo*



Figure 1:
EarthWare Logo.

EarthWare

2. *EarthWare website* (<http://www.cla.sc.edu/infosys/sui/index.html>)- The final versions of the installable products have straightforward instructions available from the EarthWare sub-website of the INFOSYS (<http://www.cla.sc.edu/infosys>) website. The site is accessible to both end users and any IT staff supporting them. Figure 2 is a screenshot of the EarthWare website for downloading and installing all products. Also available on this site are links to other SUI-relevant resources. The website allows us to identify and use standardized technologies to provide consistent support and documentation as well as transfer of the products to home computers and other organizations.



Figure 2: EarthWare website screenshot.

3. EarthWare Screensaver for Windows
4. EarthWare Screensaver for Macintosh OS X
5. EarthWare Screensaver for Macintosh OS 8 & 9
6. EarthWare FLASH Movie
7. EarthWare Power Point Presentation

Project Support.

Principal Investigator:

- Jacquelyn D. Cunningham, Applications Analyst II, College Dir. Instructional Technology, CLA Comp & Info Tech Center: College of Liberal Arts

SUI mini-grant funds covered cost of software, and stipends for two graduate and two undergraduate students.

- Sharath Kallu, Research Assistant, Department of Department of Electrical Engineering: College of Engineering & Information Technology (graduate)
- Kalyan Kankipati, Research Assistant, Department of Electrical Engineering: College of Engineering & Information Technology (graduate)
- Jared Jordan, Graphics Artist, Department of Art: College of Liberal Arts (undergraduate)
- Michael Sakooserksadee, Graphics Artist, Department of Art: College of Liberal Arts (undergraduate)

Facilities:

- The project was conducted in the iResearch Lab in the CLA Computing and Information Technology Center (David Mullaney, Managing Director), College of Liberal Arts (Dr. Joan Hinde Stewart, Dean), University of South Carolina.
- Products were tested by the students, inside and outside the Center; by the PI on her three office workstations.

Presentations.

The development team is scheduled to present EarthWare at the following:

“EarthWare - A New Media Model For Conserving Planet Earth”
INFOTECH CONFERENCE: MAY 12-14, 2003 - COLUMBIA, SOUTH CAROLINA.
Gambrell Hall • University of South Carolina • Columbia, SC 29208
<http://infotech.cla.sc.edu/newindex.html>

Further Information. To learn more about EarthWare and to download EarthWare products, please contact the PI or see <http://www.cla.sc.edu/infosys/sui/index.html>.

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