Senior Project - smrt

3D Media Center
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Sun Microsystems, Inc. has been an innovator in the world of computing since its inception in 1982. In following this innovative spirit, Sun has created Project Looking Glass (LG3D) to explore the field of 3D user interfaces and to determine what improvements in user interaction can be made by taking advantage of the third dimension. Sun hopes to use LG3D to break down the 2D barriers that Sun feels have become limiting factors in user-interface design and to usher in a new generation of 3D computing.

The purpose of this project is to utilize LG3D to explore the user-interface possibilities for a 3D media center -- think TiVo but in 3D. The goal is to utilize the third dimension in such a way that navigating through the media center is noticeably faster, more convenient and more intuitive than navigating through a 2D system.
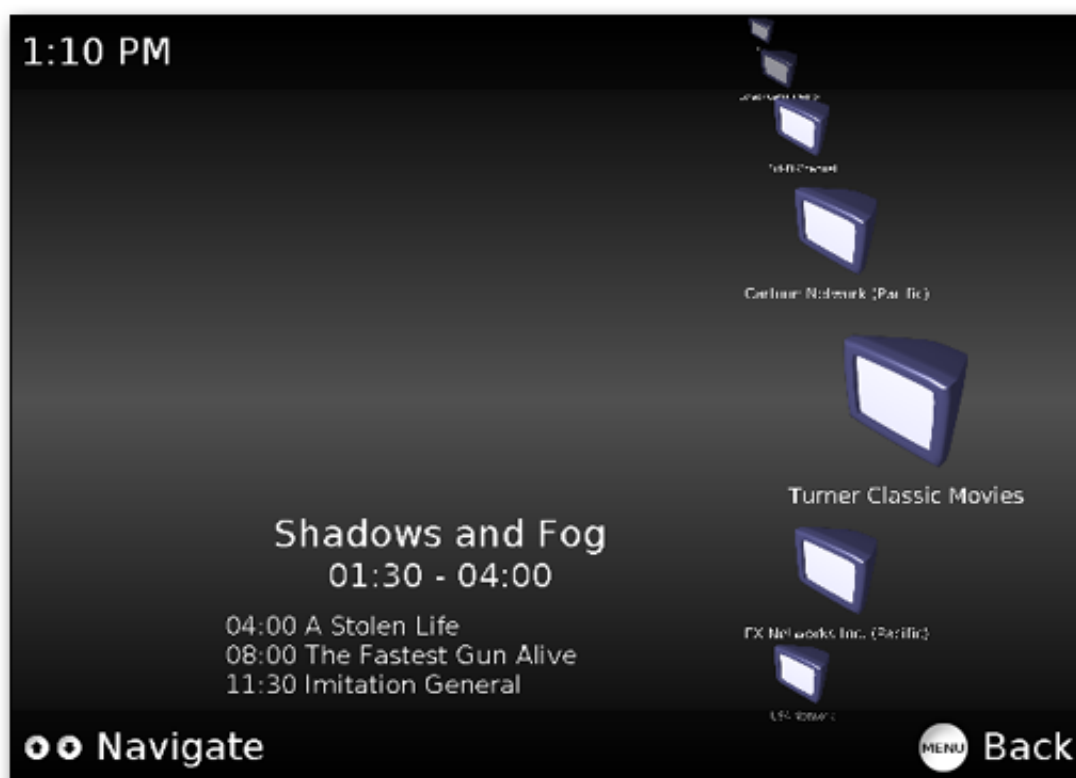
The software was built using LG3D and employs three basic menus: the ring menu, the arc menu and the cityscape menu.

- The ring menu, which has all of its items around an invisible ring, has the advantage of an elegant look and the quickest access to its items. At most, the user must go through only half the items in the ring menu to get to any other item. However, only so many items can be added to the ring without it becoming cluttered.

- The arc menu has all of its items in an arc that trails off the borders of the screen at the top and bottom, and is used as a TV guide -- i.e., for viewing programming information. The advantage here is that many more items can be in the menu, since they are not all visible at one time and there is room to the left of the items to display additional information such as TV program info.

- If however, the user wants to browse through a large library of media, they will want to use the cityscape menu. The cityscape menu has a series of "buildings", each representing a file or directory. The directories' contents are represented by little buildings on top of the directory building. The advantage here is that representing and navigating vast media libraries is convenient and simple because the user always knows the directories contents before they open it.
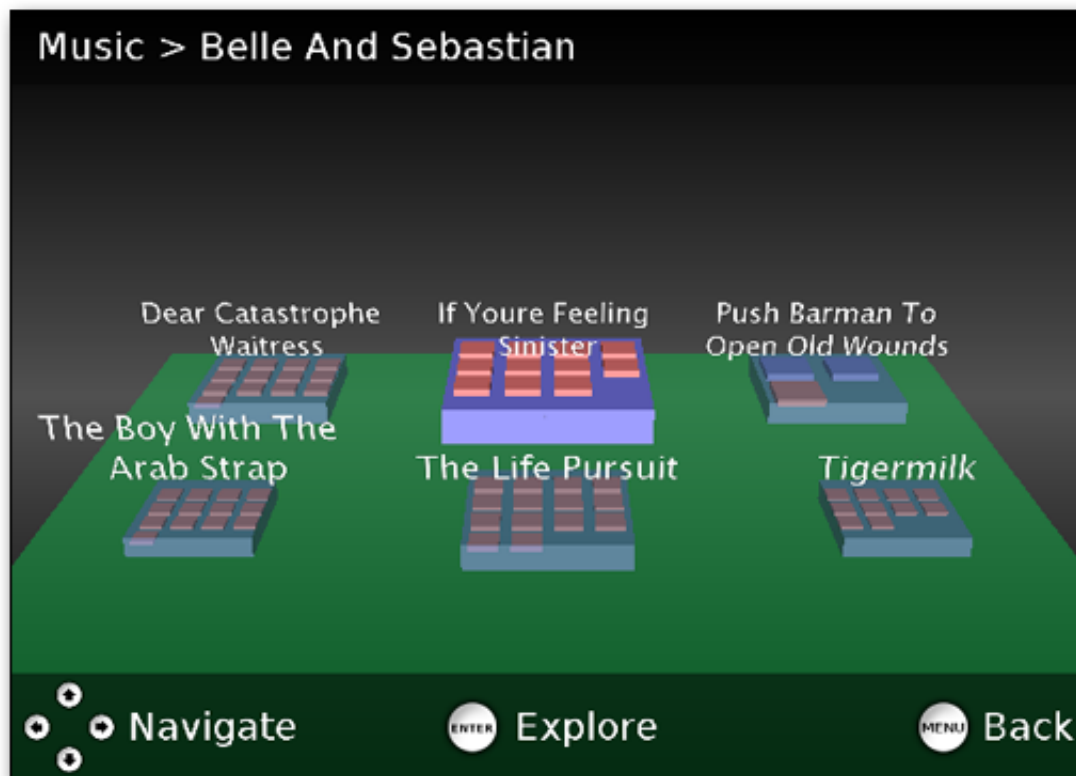
The media center was implemented in Java.

Ring Menu

Arc Menu

Cityscape Menu