

TUPLE SPACES Project – Group Scribbles Activity

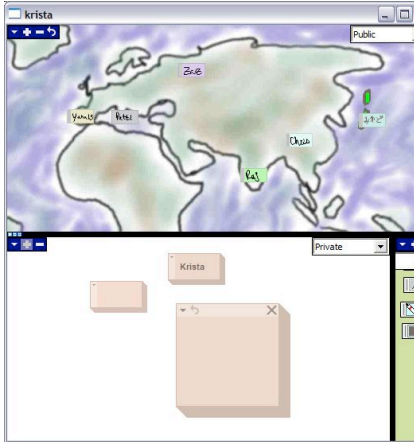
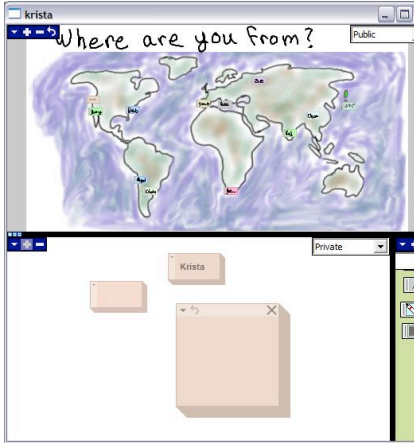
Simple generation, distribution, collection, and aggregation of ideas

Group Scribbles

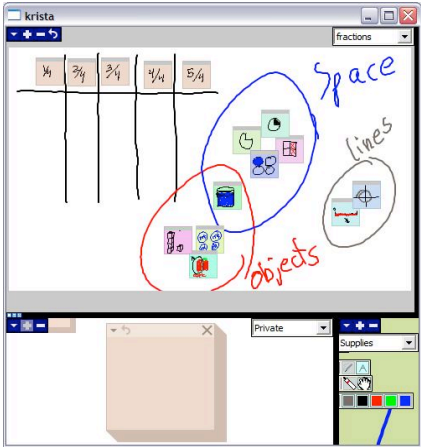
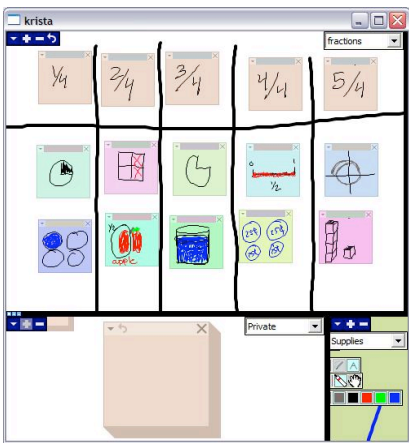
GroupScribbles enables collaborative improvement of ideas based upon individual effort and social sharing of notes in graphical and textual form (“scribbles”). An analogy to HyperCard [1] puts GroupScribbles in context. When Apple produced the MacOS in the 1980s, it had wonderful new educational capabilities, such as multimedia and hypertext. However, educators could not yet realize the potential because only programmers could access the capabilities. When HyperCard was released, educators responded with a surge of creativity. With HyperCard, educators were able to make everything from grade books to frog dissections without hiring a programmer. By analogy, today’s classroom has new capabilities of wireless connectivity among handheld or tablet devices for every student. However, educators cannot tap these capabilities without a programmer and hence little innovation is occurring. With GroupScribbles, SRI introduces a way for educators to rapidly design new collaborative and group learning activities without the need for additional programming. The only limit is educator’s creativity.

The GroupScribbles user interface presents each user with a two-paned window. The lower pane is the user’s personal work area, or “private board”, with a virtual pad of fresh “scribble sheets” on which the user can draw or type. A scribble can be shared by dragging and dropping it on the public board in the upper pane. When this happens, a tuple representing the scribble is written to a tuple space corresponding to that public board. Other participating clients monitor the space for such activity and update the client’s display. Users may interact with public scribbles in a variety of ways, such as browsing their content, repositioning them, or moving one from the public board into their private space. New public boards can be created to support multiple activities or spaces for small groups to work.

Tuples: GroupScribblesUserTuple, 8 render tuples (e.g., SheetRenderTuple), 7 metadata tuples (e.g., SheetMetadataTuple), and 4 board tuples (e.g., BoardDrawingTuple).



Participants share where they are from by writing their name on a label and placing their label on a public map (top). Different regions of the map can be brought into focus by zooming in (bottom).



Participants draw and share different visual representations of fractions (left) and categorize the types of representations contributed by participants (right).

[1] Hypercard is a registered trademark of Apple Computer, Inc.