Medium-Fi Report

1. Team Mission, Problem/solution overview

Mission Statement

To have customers gain a deep understanding of the cultural and historical implications of topics by exploring diverse perspectives shared by people around the world.

Problem Statement

The world needs a better cultural and historical understanding. The absence of a global dialogue leads to misunderstandings and prejudices, and in the worst case, wars. We believe that this problem is largely due to the current model of teaching history, which is often impersonal and one-sided.

Solution Statement

In order to address these issues, we propose a web platform for sharing first-hand accounts, where people from all over the world will record their significant life experiences of particular time periods or events in history. With an artifact of first-hand narratives, it will be possible to facilitate a host of ways to engage students and improve contextual and cross-cultural understanding. Our proposed solution provides secondary benefits to elders by generating excitement about technology and increasing feelings of connectedness and purpose. Our solution also has the potential to improve cross-generational understanding.

We envision an extension of our system to public displays (e.g., the wall of a building) that will make use of motion tracking technology.

Customers

Students Elders Everyone

2. Tasks

3 representative tasks to test your interface (labeled simple, medium, complex)

Task 1: Explore a topic (simple)

This task involves selecting a topic and browsing perspectives on the topic.

Scenario 1: A student is learning about a topic in history class (e.g., Nanjing Massacre) and wants to learn about this topic from different perspectives. She uses our application to search for this topic, and view a few diverse perspectives in order to gain a broader understanding of the cultural implications.

Task 2: Share a perspective (medium)

This task involves recording a perspective (video, audio, or text) and tracking that perspective in the system.

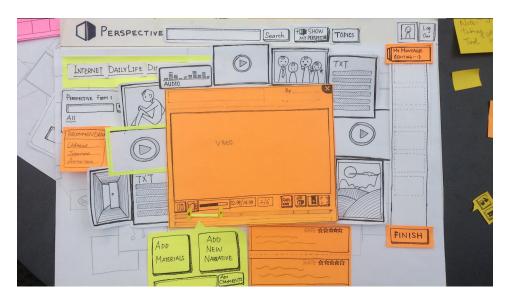
Scenario 2: A senior citizen has a strong desire to share her perspective on an event in history she has lived through (e.g., Japanese Internment), and later to learn how her perspective contributes to a better understanding of that event by others.

Task 3: Synthesize perspectives (complex)

This task involves searching multiple topics and collecting perspectives with the aim of understanding "higher" concepts that bridge topics.

Scenario 3: A student is researching for a paper that synthesizes many aspects related to a broad topic in history (e.g., World War II). He must search for perspectives across multiple topics, and collect them in an organized manner.

3. Revised interface design



The lo-fi prototype was overwhelming for users, in terms of the number of options, the clutter, and excessive movement implied a moving graph of a topic in the background. We simplified, while trying to maintain advanced features for users who want to do our complex task of synthesizing multiple perspectives (collecting). This is a tension that we will keep in mind as we continue to iterate.

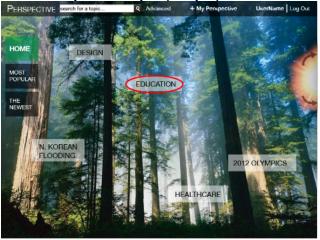
Other users of our lo-fi misunderstood the intention of our system. One user thought he might use it for shopping. In response, we adopted a tree metaphor ("tree of knowledge," "tree of wisdom").

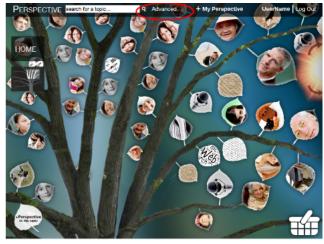
There was also confusion over the notion of a "montage." We decided that montaging is not the primary task of someone who is synthesizing multiple perspectives; collecting is the primary task. Thus, we adopted the metaphor of a basket of leaves for collecting perspectives and materials, and we have the system automatically generate a montage on the "personal page." One might think of this montage as a summary of the basket.

In addition, tagging confused users. We removed tags from the system so that users simply enter a search string.

In response to a user who did not want to log in, we ensured that users do not need to log in in order to view. (Users still need to log in to add materials and use personal page features.)

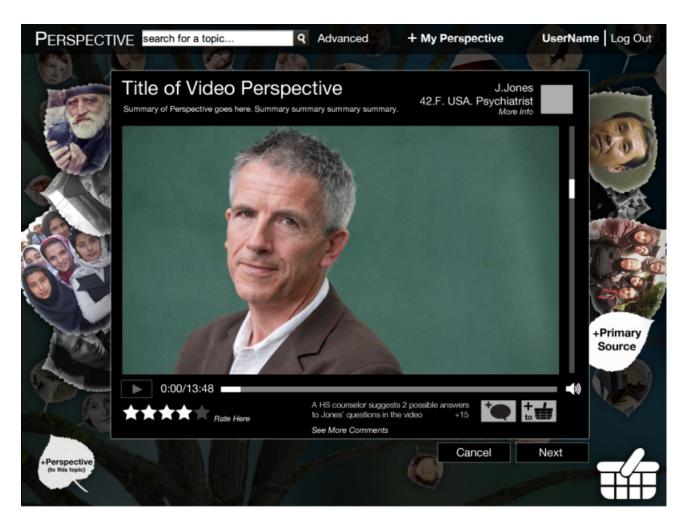
Task 1: Explore a topic (simple)



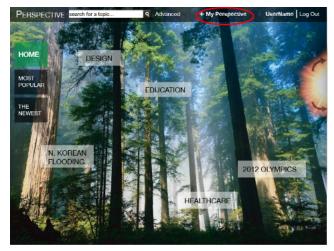


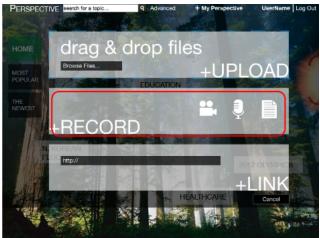


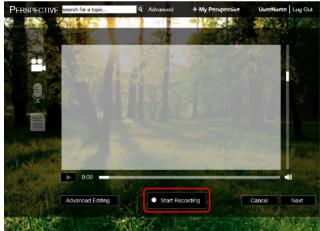




Task 2: Share a perspective (medium)





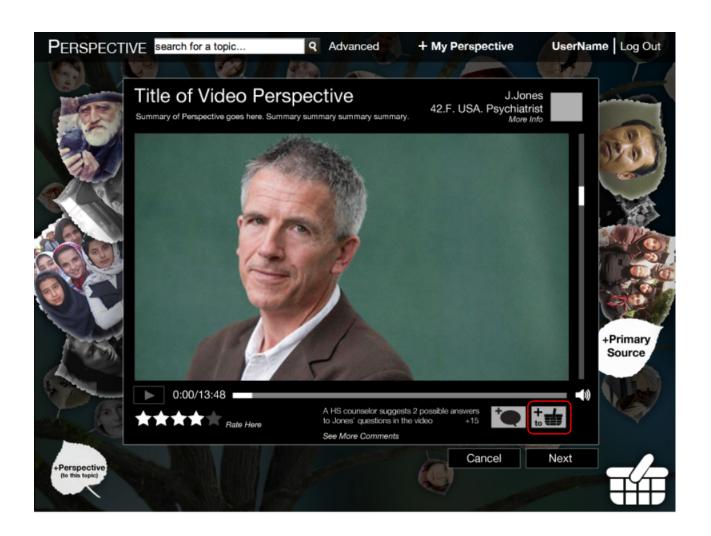


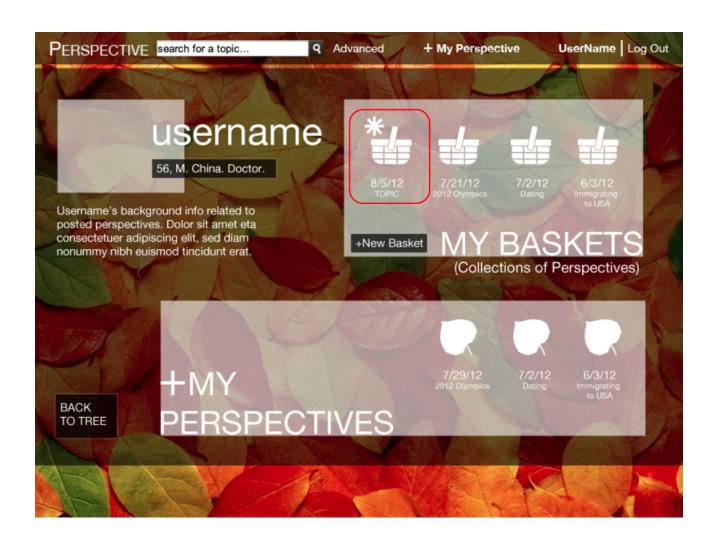


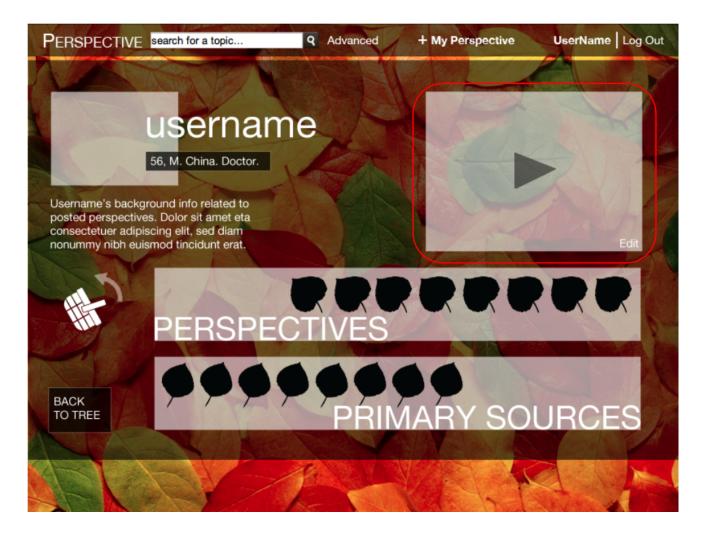


Task 3: Synthesize perspectives (complex)









4. Prototype overview

We developed our medium-fi prototype using Justinmind, using 10-20 screens. We use a small number of hard-coded topics and content. Justinmind did speed up development time in terms of defining basic pages, buttons, and interactions. However, viewing actual video content is not possible on the prototype due to restrictions of the software, in particular the inability to detect location of position in a playing video. Actually, Justinmind does not have the ability to detect position even in their sliding bar widget.

In the interest of development time for the medium-fi prototype, we had to make a number of concessions. Throughout our application the sun controls the granularity of the display (i.e., the number of topics in the "forest" view and the number of perspectives in the "tree" view). We tried to show this in the tree view, but we decided not to implement it in the forest view because it works analogously.

The key technology that we have yet to develop has to do with visualization of large numbers of videos. We plan to do this using clustering and ratings eventually. We also hope to implement annotations (note-taking) as part of the synthesizing perspectives task, which one user requested during the lo-fi testing.

5. Prototype images (as many as needed)

