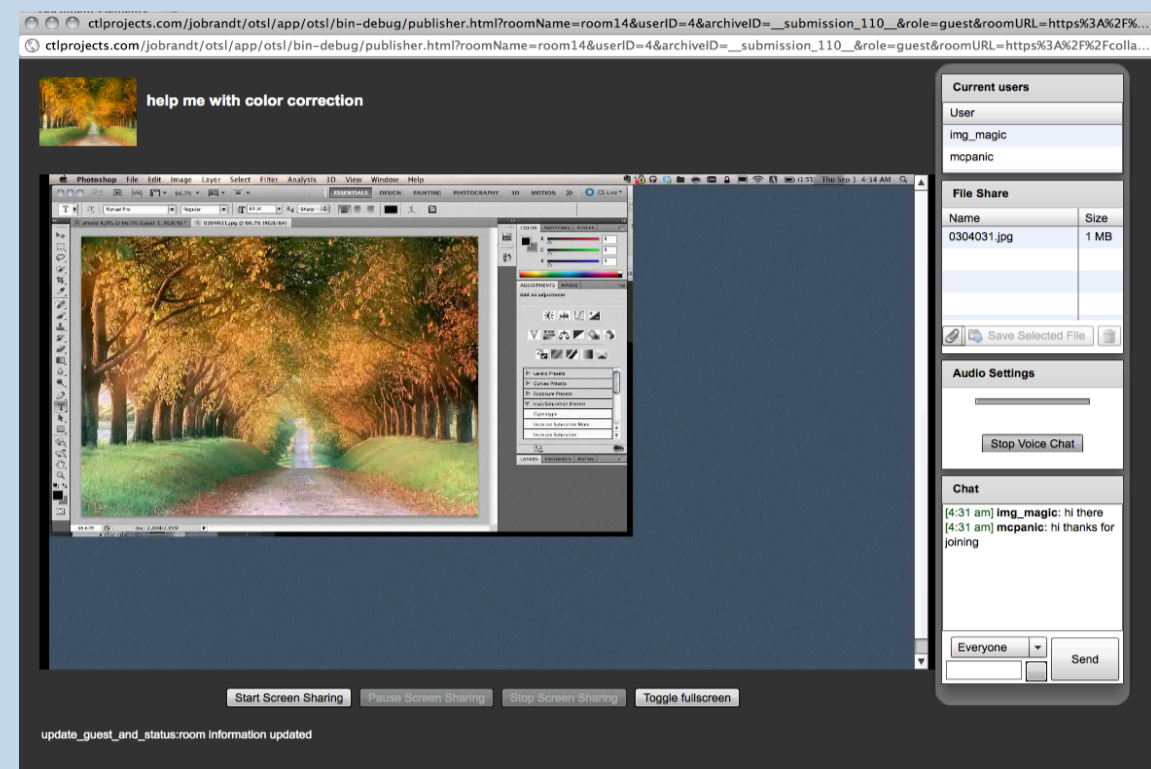


Photoshop with Friends:

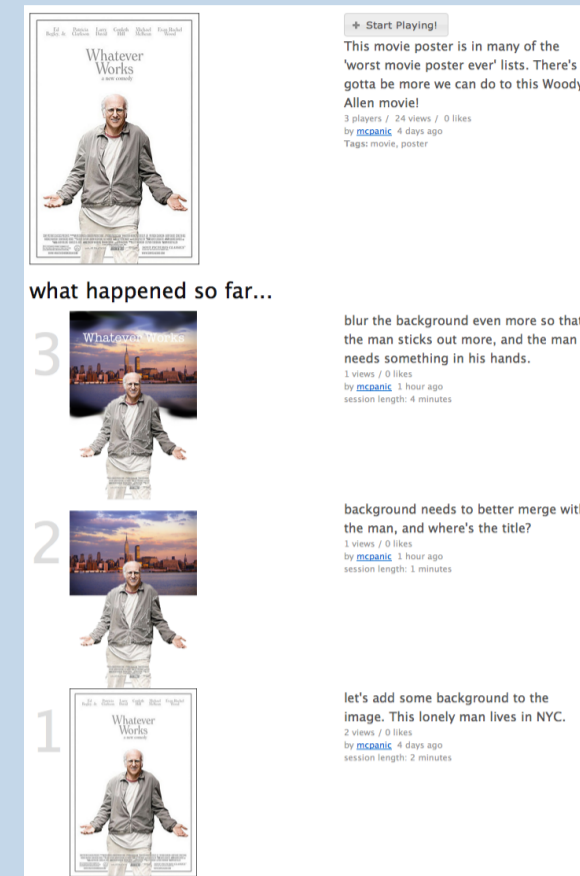
A Synchronous Learning Community for Photoshop Users

Juho Kim (MIT), Ben Malley (UMich), Joel Brandt (Adobe), Mira Dontcheva (Adobe), Diana Joseph (Adobe), Krzysztof Z. Gajos (Harvard), Robert C. Miller (MIT)



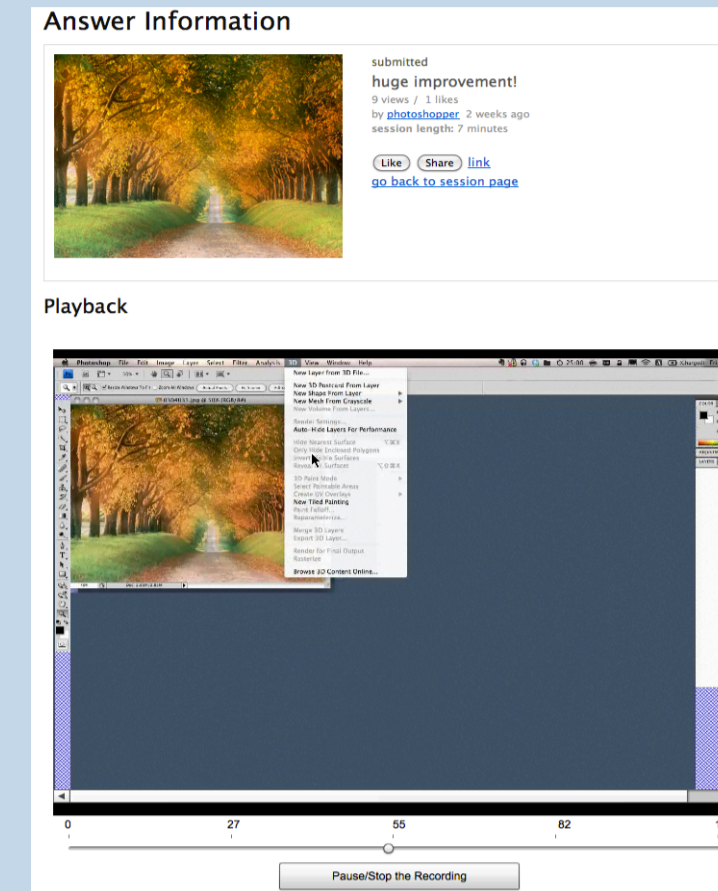
ASK & ANSWER

Synchronous Learning Support
Q&A with screen sharing and voice chat



PLAY

Collaborate design & storytelling tasks
Engagement to promote learning



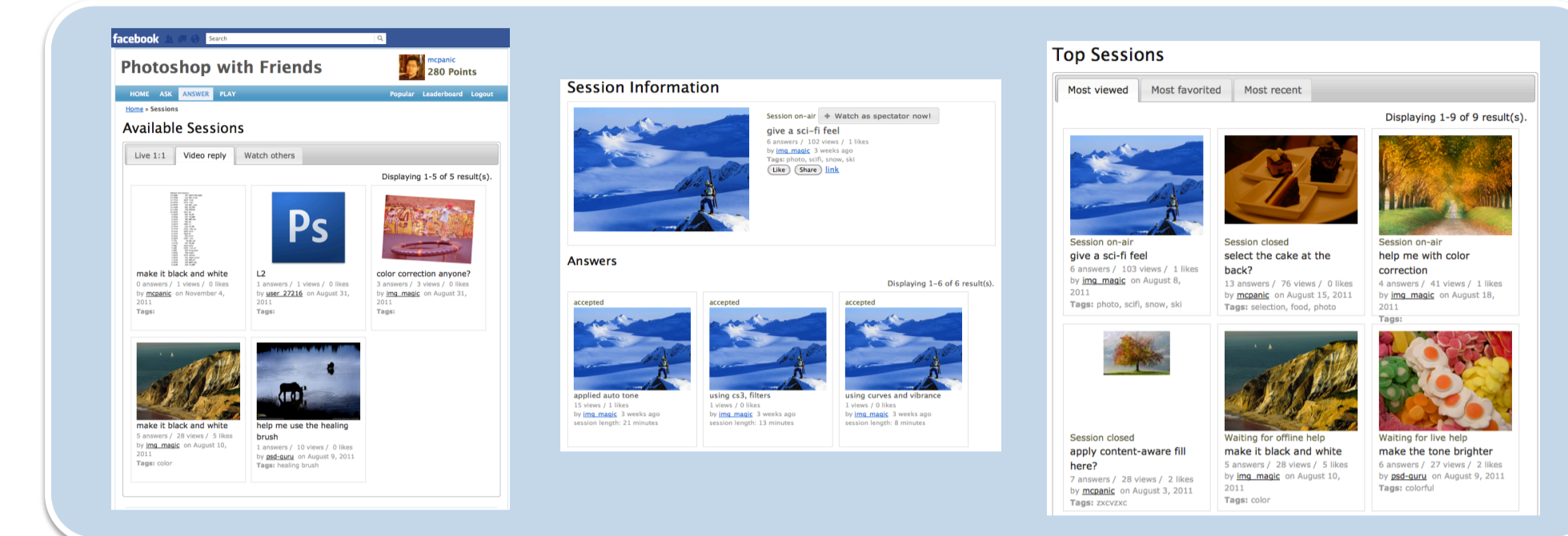
LEARN

Archived session recordings
Review, reflection, further learning

Synchronous Q&A Design

Design goals

- Support the visual language of design
- Encourage learning-by-doing
- Support various learning interactions
- Lower the overhead of synchronous sessions



Key Design Considerations

- **Goal**
 - open-ended vs explicitly given
- **Product oriented vs Process oriented**
 - capturing the process can lead to more learning
- **Degree of synchrony**
 - completely vs partially vs asynchronous (or hybrid)
- **Collocated vs Remote:** transferring the benefits of collocation to remote over-the-shoulder learning
- **Communication modality**
 - sharing of ideas, works, screens, reflections
- **Constraints**
 - time: 3 mins? seed image: image library?
- **Social interactions**
 - support natural social conventions

Collaborative Game Design

Research Question: How can a collaborative, synchronous graphic design task foster creativity and learning?

Ver 1. Collaborative Collage

- time: 15 mins, collocated teams of 4-5
- different roles and collaboration models emerged
- combining effects, new memes, image search skills

Ver 2. Chaining Game

- time: 15 mins, 1 person at a time
- open-ended task
- building on top of other's work
- experiment aversion vs liberated
- implicit social interactions
 - being additive, layer management
- sequence in the chain matters

