

Doodle Daydream: An Interactive Display to Support Playful and Creative Interactions Between Co-workers

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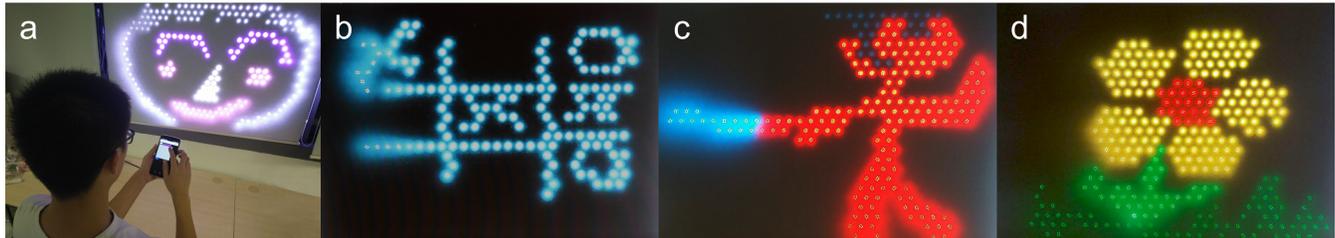


Figure 1. Participants' drawings on Doodle Daydream: (a) Smiley face, (b) Tic Tac Toe game, (c) Fencer, (d) Flower in garden.

ABSTRACT

Interactive displays are increasingly embedded into the architecture we inhabit. We designed *Doodle Daydream*, an LED grid display with a mobile interface, which acts similarly to a shared sketch pad. Users contribute their own custom drawings that immediately play back on the display, fostering moment-to-moment playful interactions. This project builds on related work by designing a collaborative display to support calming yet playful interactions in an office setting.

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1 BACKGROUND

Light displays are integrated into architectural space in many ways [1]. In office settings, interactive light displays can convey work-related information or support calm or charming interactions between people and the display [2]. Others have visualized stress in an attempt to promote mindfulness in the office [3]. Previous work explored different types of content manipulation for public displays via mobile devices [4,5].

2 DOODLE DAYDREAM

Doodle Daydream is designed to fit seamlessly into an office space. It is an LED grid display with a mobile interface, which acts similarly to a shared sketch pad. Anyone can send drawings

to the display, either from their laptop or smartphone, enabling multiple people to easily interact simultaneously (Figure 2).

Doodle Daydream was deployed in an office for 10 days. Interactions with the display were often playful and imaginative, like pausing for a moment during the workday to take a break or daydream. Users contribute their own custom drawings that immediately play back on the display, fostering moment-to-moment playful interactions. We believe *Doodle Daydream* has the potential to reduce stress by encouraging playful and creative interactions in the office, not just between person and display but between friends and co-workers over time as multiple users contribute drawings in tandem, prompting fun social speculation about the provenance of each drawing.

Doodle Daydream is a work in progress that aims to blend into architecture, complementing their surroundings and allowing increased expression as well as engagement, both in public and in the office. In this poster, our contributions include a case study of *Doodle Daydream* that shows its potential to enable rich, playful and creative self-expression and interactions between co-workers (Figure 1). We plan to build upon these early findings and approach the next phase of our project, in which we will develop a large-scale interactive architectural light display.

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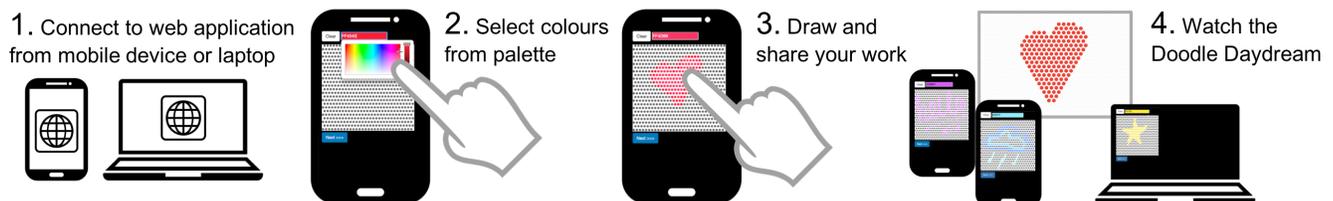


Figure 2: The *Doodle Daydream* interaction flow: The user is able to modify the public display using their personal device.