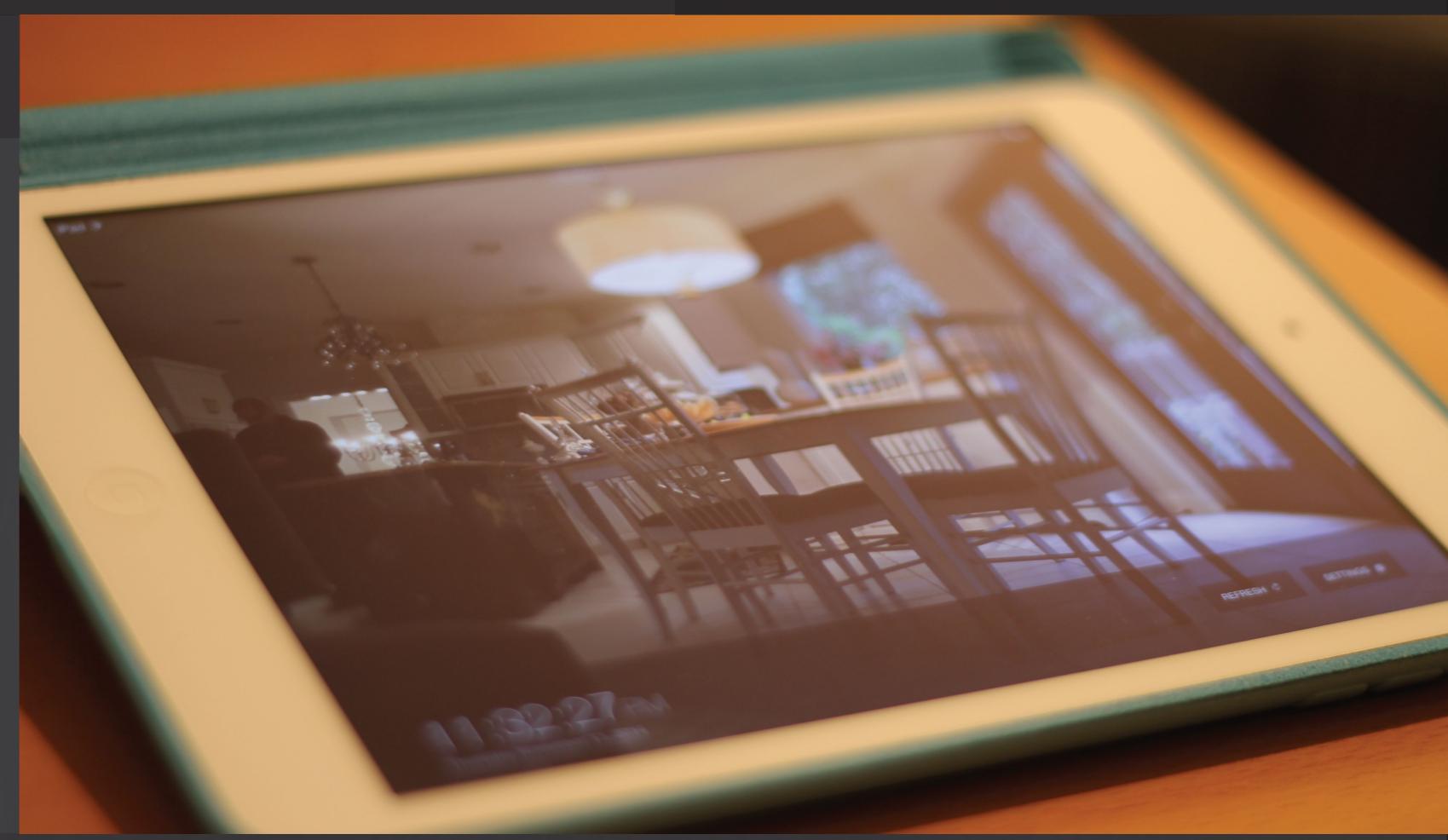


# moments family video recording

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It is easy to forget how widespread video recording and surveillance has become in public places, but what if similar technology could be used help families capture priceless memories, check in on each other, or observe changes in their domestic activities over time? This project seeks to demonstrate how an always-on family home video recording system could be designed, and explore the related implications on privacy and behaviour.

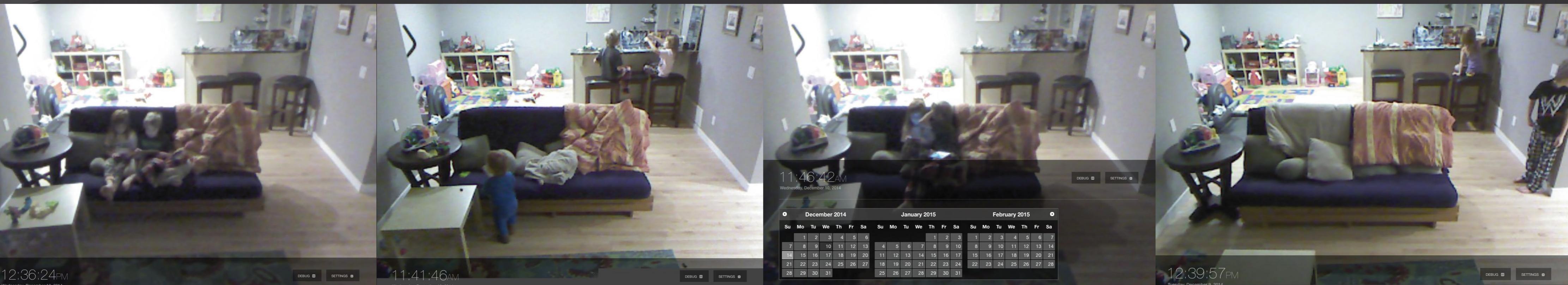


**What locations should the system be designed for?** There may be areas of the home more suited for continuous recording like common spaces such as the kitchen or family room. Other spaces may be less interesting (like an isolated hallway) or appropriate (perhaps a bedroom) for such recording.

**When should recording take place?** Video could be captured in all places at all times, or only when someone is home, or even during specific times like meals. There may be times when a family might wish to pause recording, like when certain customs are practiced or when visitors are present.

**Where should the recordings be stored and accessed?** Families might be concerned about their recordings being accessed outside of the home, or by non-family members. The video and metadata could be stored in the home itself on a private network, offering potentially higher security than if it was stored offsite.

**What kind of media should be recorded and for how long?** One could capture images continuously, or periodically with a multitude of frequency options. It is also possible to record meta data like the number of people in frame. Families may be concerned about whether other types of media (like audio) are recorded, too, and the implications of such recording.



**Location:** footage must be played in the same room as it was recorded. This grounds the viewing experience and creates a strong sense of place.



**Time:** playback always shows the selected date at the current time. Each view of an event is made more valuable because it can only be seen once per day.



**Sound:** sound is not recorded by the system. The viewer is exposed to the *recorded video* from the earlier date and the *ambient sound* of the room.

Moments is a video capture system for family homes and includes distributed video cameras (Kinect sensors), and a playback application where the footage can be reviewed. The goal of the system is to record family activities in shared spaces at all times (such as the living and dining rooms), and replay them at the same time and place on a later date (the next day, week or year, for example). The system is designed to help users reflect on past moments and experiences that took place in certain areas of the home.

We designed Moments using an autobiographical design approach where one of the authors used it in his home with his family, including three young children and his wife. The system was used regularly to capture activities occurring in the home, and the design was iterated based on this usage and the family's needs. Improvements were made to easily pick and move through dates and show one location at a time, along with architectural changes to ensure data is kept on a local server within the home.

**1. Changes Over Time:** We expect that some users will use Moments to discover changes that occur in their home or family. They might notice that their son has grown significantly taller over the past few months, or that there is less artwork in the kitchen. Thus, changes that might occur slowly over time may be more easily noticed through Moments

**2. Sharing with Family or Friends:** We imagine that some users will want to share moments with their loved ones. If a mother knows about a moment that a grandmother would find nice, for example, she could share it with the grandmother when she comes to visit.

**3. Reviewing Family Activities:** We expect that users will want to review typical family activities they may have missed while at work or busy with other engagements. A mother might want to see the kids arriving home from school, for example, or a father might want to see a clip of the kids playing games together at the kitchen table last week.

**4. Forgotten Details:** We imagine some users will want to use Moments to try and fill in the 'dead spots' in their memory. Someone that forgot their keys, for example, might check in the next day to see if they can witness themselves putting them in a strange place.