
CHI 2014 Game Jam [4Research]: Game Jams as a Research Tool

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Abstract

Recent years have witnessed a rise in Game Jams - organized events to create playable prototypes in a very short time frame. Game Jams offer a unique and quick way to prototype games. Beyond that, we believe Game Jams can also be seen as a design research method, situated in the research-through-design tradition, to create knowledge in a fast-paced, collaborative environment. The goal of this Game Jam is thus twofold: first, participants will use the Game Jam approach to investigate a research question; second, participants can, through actual practice, identify advantages and disadvantages of Game Jams as a research method. Hereby the Game Jam workshop provides a unique opportunity for HCI practitioners and researchers to gain experience in applying game-oriented methods for research.

Author Keywords

Game Jams; Design; Experimentation; Research-through-design

ACM Classification Keywords

H.5; D.2.2; H.1.2; I.3.6

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Introduction

In 2013, a Game Jam workshop introduced the CHI community to a collaborative, fast-paced method of designing, as currently successfully practiced in game design communities [3]. Inspired by this workshop's reflective session, this year's jam examines the opportunity of utilizing Game Jams as a design research tool. The *CHI 2014 Game Jam [4Research] Workshop* invites researchers and practitioners to design a game where the design process and resulting game artifact can serve as a case study. This method will contribute to existing HCI methods, by generating knowledge that benefits from being derived from a range of case studies, practical craft knowledge and collaborative reflection. Furthermore, the method sits within the existing HCI research-through-design tradition, helping the researcher to approach the design of the game both as a researcher and a game designer [11]. As such, we believe Game Jams as a research tool provides opportunities to supplement existing HCI methods [6]. This workshop therefore gives HCI researchers and practitioners an opportunity to explore the value of Game Jams as research tool by practically engaging with the game design process. What's more, jamming may broaden and deepen social interactions [12] amongst participants.

Background

Recent years have witnessed a rise in Game Jam events. Participants from diverse backgrounds (art, programming, design and scholars) meet to create functional games in a short, predefined time frame. Game Jams have proven to be successful methods for rapidly prototyping innovative games [5] and have educational value for jammers [10],[11], [15]. As Game Jams are time bound and unconstrained from

commercial concerns, they proved a unique method to push the limits of game design and development. For example, the *Global Game Jam (GGJ)* attracts thousands of developers, and is growing every year. Based on the continued growth of this event, we predict an even larger crowd for the next GGJ [7]. Furthermore, some games developed during the GGJ, amongst others *Spelunky* and *Surgeon Simulator 2013*, are now commercially available. Other Game Jams such as the *MolyJam*, *LudumDare* and *7FPS* add to the number of developed games. In four years combined, these Game Jams produced a total of approximately 17,000 games.

The annual *Games [4Health] Jam* [8] shows how a Game Jam can be utilized as a method to explore a specific research question. Initiated by academic research programs, these Game Jams study ways to elicit physical activity amongst youngsters in different situational contexts by a research-through-design method. Explorations in game development for public spaces and swimming pools presented researchers with insights into the design processes of said games. Hereby the design guidelines for games that elicit physical activity were deduced from both theoretical resources as well as actual design experiences.

The *CHI 2013 Game Jam* resulted in a range of divergent games. It also resulted in an interesting reflection exercise at the conclusion of the workshop where participants discussed the possibility of bringing this format into their research labs as a method to accelerate their progress. This year's workshop is an answer to this reflection: proposing to utilize the established rapid-pace format of Game Jams as a research tool to reveal knowledge and create new

understandings. The findings will mainly concern design knowledge, but are not limited to this domain.

As such, the Game Jam [4Research] examines the opportunity of utilizing Game Jams as a design research tool. During the Game Jam, researchers team up in an attempt to gain insight into a research question by creating a game. These games or design processes will act as case studies that create insights into the questions posed. For example, explorations can be done in making *Augmented Forearm* interfaces [12] more playful, or how games like *DrawSome* or *Pictionary* can benefit from digital pen input.

The collaborative nature of the Game Jam provides an opportunity for participants from varied backgrounds to network and bridge gaps that exist between institution, research, and industry. Musil et al. [10] suggest that Game Jams provide an effective and focused experience and that participants gain valuable skills in prototyping and collaboration. Preston et al. [11] advocate the use of Game Jams to nurture innovation, and computational and rule-based thinking. By bringing together developers and researchers in a Game Jam we may build research ventures, networks, and long-term collaborations between participants.

Goals

- Explore jamming as research method
- Learn this method by doing it
- Identify the advantages of this method (rapid, collaborative)
- Identify the disadvantages (difficult to generalize results, early bugs in the prototype that may hinder any study)
- Develop a playable game

Workshop plan

Participants are encouraged to think about tools and methods to bring to the workshop in order to build games. The workshop will take place over two days. During the first day, participants will introduce themselves, and pitch ideas. Then teams will be formed and work will begin.

After lunchtime jammers discuss which existing research method would best benefit the research question posed and how the Game Jam can contribute to this method. At the end of the first day, we will close with short presentations from each group, sharing ideas and techniques, followed by an informal dinner to encourage cross-group discussion and collaboration.

The second day will begin with continued work on projects after a short reflection of the day before: "what are the pros and cons of a Game Jam as research tool", and "how can the Game Jam format be improved to contribute insights?" In the afternoon an informal presentations among the participants is scheduled. The workshop will close by bringing the games into the common areas of the conference to expose participants' work to the broader community. Special attention is given by organizers to elicit the 'Game-Jam-feeling' of belonging, which appears to foster co-operation and social negotiations amongst jammers.

Follow-up and dissemination

We will document the attendees' processes and results with photographs and video. An example of this can be found on: <http://youtu.be/bcPHa4NfC1tM>. We aim to write an article about lessons learned, involving everyone by means of the format of massively collaborative editing [13].

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