Games User Research Methods

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Abstract

This **hybrid** course will allow participants to understand the complexities of games user research methods. For this we have put together 4 sessions (2 hours each, 8 hours total) of content on applications on different user research methods in games evaluation to help participants turn player feedback into actionable design recommendations. The course is designed as a hybrid course with 2 sessions to be delivered online before CHI PLAY 2018, one interactive face-to-face session will be delivered during CHI PLAY 2018 and one final session to be delivered online shortly after CHI PLAY 2018. The course is designed from an applied user experience (UX) research perspective and should allow for participants unfamiliar with user testing and basic user research skills. The course material is based on the Games User Research book [1] and will be delivered by the book's editors.

Author Keywords

Games user research; user testing; playtesting; user experience; game analytics; evaluation; game usability

Introduction

The community of UX researchers has been rapidly evolving for the past years, extending and modifying existing methodologies used by the HCI community to video games. This hybrid course investigates a key topic that must be addressed for newcomers to continue advancing the field: method frameworks,

covering both qualitative and quantitative approaches as well as predictive evaluation methodologies and reporting the study results.

This course introduces principles of games user research methods **aimed to a largely junior audience**. However, this does not mean that this course is not useful for senior researchers. This course is particularly useful for young researchers, ranging from graduate students to postdocs and junior faculty.

Why Games User Research Methods Course

The progress made in the Games User Research (GUR) field has set the foundations of rigorous and effective evaluation techniques. The initial refinements were geared towards the adaptation of classical HCI evaluation techniques by altering the evaluation methods from a purely productivity focus to an entertainment focus. Advancements were made towards identifying the advantages and disadvantages of multiple techniques, and the specialization of particular techniques for the games industry [2,3]. Previous CHI workshops covered primarily these traits in the field [4, 5, 6].

The progress of the GUR community has produced a solid groundwork. However, the very necessary task of studying the techniques suitable for evaluating gaming experience has focused the process onto the application of various user research methods. Thus, **understanding the advantages and disadvantages of different methods** and **the process for triangulation these methods to better address research questions** are key areas that must be addressed for the continued advancement of the GUR community.

In this course, we will first introduce several GUR methods to get participants familiar with the field and outline which methods are suitable to which study design, project size and budget. We will then help participants structure a basic playtest and show them how to integrate actionable feedback in the next development iteration of their game.

This course is meant to provide new insights for user experience researchers and human-computer interaction graduate students interested in game evaluation and games user research. We expect some students to be novices in the field of games user research, but will assume basic knowledge of HCI. Some participants might already be experienced in designing, developing, or evaluating other artifacts (not games) or products.

Course Schedule and Outline

The first session will be online and focuses on teaching game evaluation with emphases on the importance of iteration. It will discuss the basics of applied games user research with very simple methods like observation, interviews and gameplay breakdown reports.

The second session will be online and dives deep into quantitative approaches, with a strong emphasize on game analytics. It will discuss different game data collection and analysis approaches as well as issues around biases and validity in data collections.

The third session will be a face-to-face meeting at CHI PLAY 2018 which will include some interactive tasks around heuristic evaluation with example games. This session will also cover fundamental knowledge on

physiological evaluation in games as well as conducting user research on virtual reality (VR) titles.

At the very end, our final online session (post-conference), we will discuss approaches in reporting games user research findings to game developers and highlight the contributions of games user research in production and post-production.

Two weeks before the conference all registered participants will receive a doodle invite to determine best timing for online sessions, we can schedule two classes for each session to accommodate time difference. We will use online services such as Zoom or Adobe Connect to deliver these online sessions. We will work with the conference chairs to schedule the 3rd Session during the conference.

We believe that all participants will benefit from our cross-disciplinary approach that will show the real value of games user research practices for game design. Our key learning objective is for the participants to see the value of iterative playtesting integrated in the development process.

Sessions	Topics	Related readings from [1]	Instructor
Session 1 – 2hrs - Online	What's GUR GUR Process Qualitative Methods	Ch 1, 8 Ch 3 Ch 10, 11	Dr. Pejman Mirza-Babaei
Session 2 – 2hrs - Online	Quantitative Methods Biases and Validity	Ch 9, 20 Ch 22	Dr. Anders Drachen
Session 3 – 2hrs – Face-to-face at CHI PLAY 2018	Heuristic Evaluation Biometrics GUR in VR	Ch 14 Ch 16 Ch 30	Dr. Lennart Nacke
Session 4 – 2hrs - Online	Reporting GUR findings GUR in Production GUR in Post- Production Future Directions	Ch 18 Ch 2 Ch 4 Ch 31	Dr. Pejman Mirza-Babaei Dr. Anders Drachen Dr. Lennart Nacke

Table 1 – Course Outline

Course Instructors

Pejman Mirza-Babaei, PhD, is the Director of UXR Lab and an Associate Professor for user experience research at the University of Ontario Institute of Technology. He worked as the user research director at Execution Labs, Montreal. He has been involved with the GUR community since 2009, publishing more than 50 articles and co-organizing workshops and courses at international conferences. He has contributed to more than 20 published commercial games, including award-winning titles such as pewdiepie: Legend of the Brofist, Crysis 2, and Weirdwood Manor.

Lennart Nacke, PhD, is the Director of the HCI Games Group and an Associate Professor for human-computer interaction and game design at the University of Waterloo. He is a world-leading authority on the cognitive and emotional aspects of player experience in video games, with a special focus on physiological metrics and gameful design. He has authored more than 100 research publications on these topics, which have been cited more than 8,000 times.

Anders Drachen, PhD, is a Professor at the Digital Creativity Labs, University of York and a veteran data scientist. His multiple award-winning work in the game industry as well as in data science is focused on game analytics, behavioral analytics, business intelligence, game data mining, user experience, industry economics, business development, esports and Games User Research. His research and professional work is carried out in collaboration with companies spanning the industry.

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