an HCI-based Player Observation Approach to Game Design

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Abstract:

While there are no formal theories of how game design should be done [Schell 2015], there are good game design principles that the PI has taught in his courses (SM3601 Game Prototyping and Design, SM2603 2D Game Production, and SM3608 3D Game Production). However, these game design principles are currently only delivered to students in lectures via PowerPoint slides, which do not engage some students well. Instead, we aim to take an HCI-based (Human-Computer Interaction) approach where researchers observe people in naturally occurring settings. We aim to take a novel pedagogy of player observation for games, where we have students observe others play their games-in-progress, and then reflect on their games and improve them. The key is to have students actively observe and think for themselves, rather than only passively listen to the teacher. To facilitate this approach, we will organize Game Playing Days/Hours. In contrast to game jams where games are made once, these game playing sessions will allow for observation, such that students can observe other players, think independently, and learn from them. Students will gather data on player immersion, engagement, and fun, and obtain potential changes to be made to their games-in-progress. In addition, this will be an iterative process, as students will continuously improve their games-in-progress by testing them at various stages, and receive feedback from real players by observing how their games are played. The students' games-in-progress form part of the submission of their final project in the PI's courses. We will also keep and document the student prototypes at various stages for future students to learn from. Furthermore, we will document this player observation process such that other courses with project-based learning may benefit.