

# Prom Week

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## Abstract

This paper outlines Prom Week, a game which leverages the social AI system Comme il Faut (CiF) to create a novel experience in which social relationships are playable.

## Demonstration Description

Prom Week is a game that makes the social relationships between characters playable through the use of Comme il Faut (CiF), a social AI system. The design impetus of Prom Week is to enable play in the emotionally fraught social setting of a high school in the days leading up to prom. To have the social play in Prom Week approach the level of playability currently available in the combat systems of action oriented games, we placed CiF at the center of the game design process, making the game intrinsically about social play. Much like the physics systems that underlie many action games, the basic social rules of the story world are encoded inside of CiF to provide a sense of "social physics." Without knowing precise gravitational constants, players of action games have an intuitive understanding of the effect gravity plays on the world. Similarly, CiF leverages the player's own social experiences to understand, traverse, and play the social world of Prom Week. This allows for a high level of agency over the game's narrative; as every choice affects the social landscape, which in turn determines what characters are willing to do with each other, every choice leaves a meaningful impact on the story.

We developed CiF as an experimental AI system for modeling individual characters and the ever shifting relationships between them. When it was completed, we determined that the only way to show the strengths--and discover the weaknesses--of the system would be to make

it the heart of a playable experience. Developing Prom Week led to several inspirations for improvements to CiF's expressive power. Implementing these enhancements to CiF led to Prom Week being a more expressive game, which in turn inspired further developments to CiF. Thus, AI motivated the game's design while game design motivated the AI; a symbiotic relationship (Eladhari & Mateas, 2008)(Smith & Othenin-Girard, 2012). Though CiF may be the heart of Prom Week, neither system would be what they are had the development of one not informed the development of the other.

CiF and Prom Week represent a novel contribution to playable experiences by being the first game to allow a rich depth of fully realized social game play. Additionally, Prom Week represents a new genre of social problem solving. This approach and technology is now being used by other research projects in genres ranging from role playing games to training simulations.

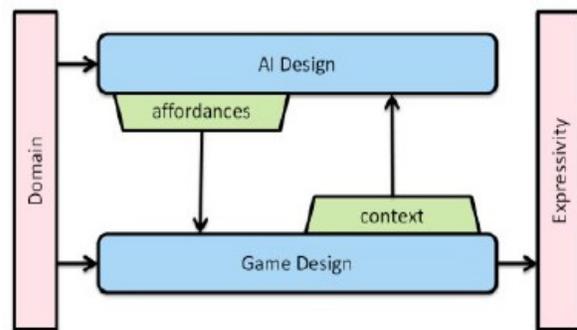


Figure 1. A diagram charting the AI Based game design that Prom Week employed with CiF



Figure 2. A screenshot of the user interface depicting what actions Oswald wants to take towards Doug, including Showing Off to him and Wooing him.

Prom Week was released in February 2012, and has since been nominated for several awards, including Technical Excellence at the 2012 Independent Games Festival, and was a finalist at IndieCade 2012. It can be freely played at <http://www.promweekgame.com>

## References

Eladhari, M. P., & Mateas, M. 2008. Semi-autonomous avatars in world of minds. *Proceedings of the 2008 International Conference in Advances on Computer Entertainment Technology - ACE '08*, 201. New York, New York, USA: ACM Press. doi:10.1145/1501750.1501798

Smith, G., & Othenin-Girard, A. 2012. PCG-based game design: Creating Endless Web. *Proceedings of Foundations of Digital Games*.



Figure 3. An excerpt from a social exchange between two characters. Zack, left, tries to ask out Monica, who is out of his league. Her rejection reflects a few of her character traits, namely her cold and honest personality.