

# Dynamic Social Network Game Design in Prom Queen

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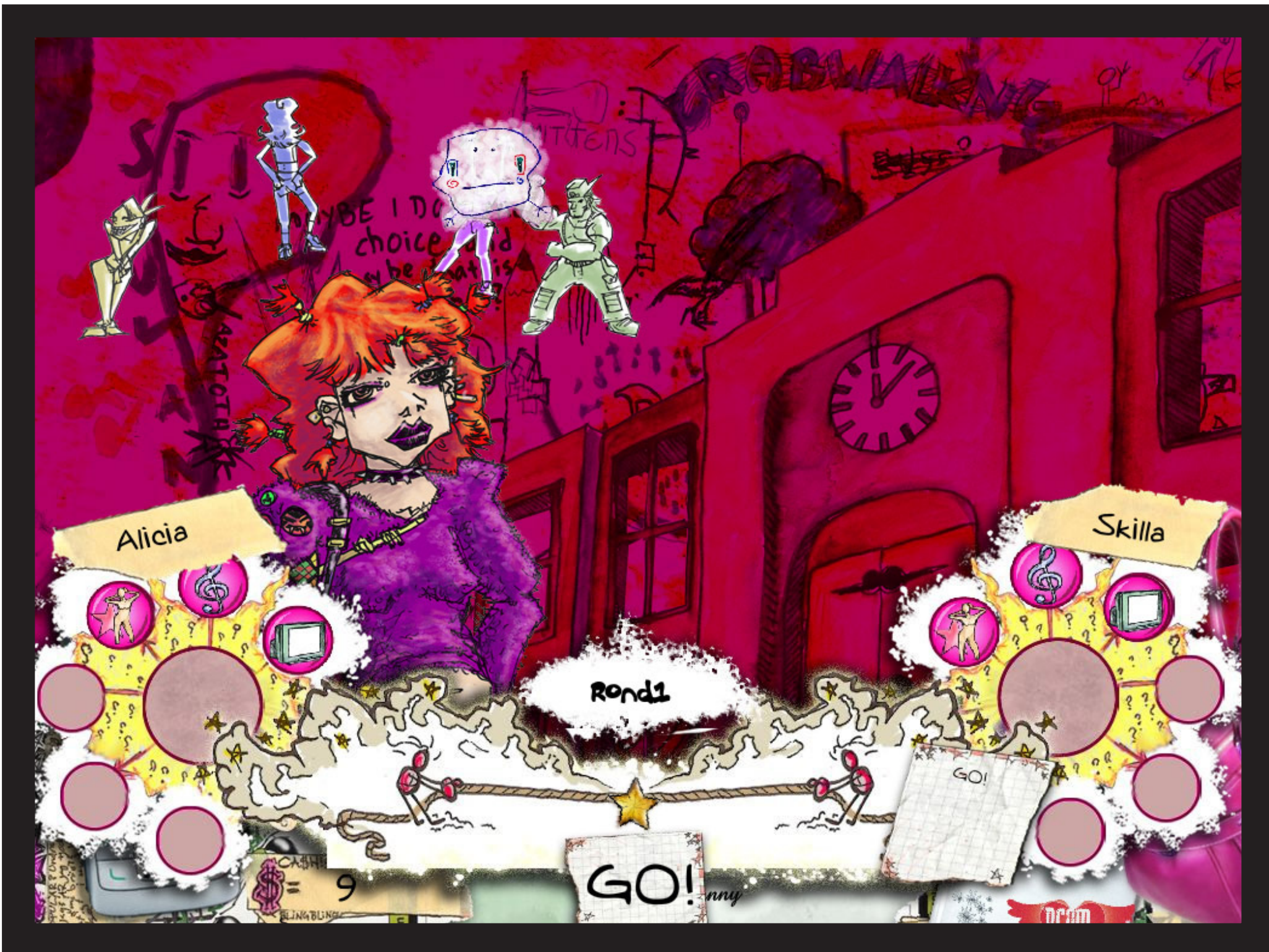
PromQueen is a commercially published single-player life simulator game. The player plays a female student struggling to survive her last year in high-school and eventually be elected prom queen. The game's core mechanic is social interaction with 20 class mates. The class mates feature a dynamic personality constructed out of roughly 25 attributes, both actual attributes and attributes representing the commonly agreed upon perception of them.

The class mates make up a small social network model, designed to create a changing social landscape and high replayability. The social network features a strict hierarchical system that both player and non-player agents strive to climb, where quarterback and cheerleader captains are on the top, while nerds and paleontologists end up at the bottom.

The game was designed to use social structures to provide conflict- exploration- and pattern recognition challenges. High school culture, rumours, reputations, hierarchies and social dynamics were used to create the depth of the social network. The game was designed to be a reflection of what it is like attending high school in a consumerist environment, especially for girls.



The Abstract dialog options - Flirt, Push Alcohol, Gossip, Style Combat, Talk Parties, Cuddle, Insult, Trade Dark Secrets



PromQueen was developed as an undergrad project at Gotland University and later realized as a commercial game by Digital Agitation, produced by Hard Rauk Entertainment and published by Bringiton 2008. A demo version of the game (playable on most windows machines) can be downloaded from <http://PromQueenGame.com>

## Dialog

Interacting with the 20 class mates (non-player characters) by dialog is one of the game's core activities.

The dialog is an abstraction of different interactions. The most common interaction is the "Chat", which is a short dialog between the player and the class mate, during which the player and the non-player character both get to choose one game move. The game moves use character properties and run tests to determine the effects of the move - much like exchanging blows in combat in an action role playing game.

A narrative description of what is being said is mediated in text between each game move in order to give life to the abstract icons.

Each outcome has a high chance of changing both characters' social status and attributes such as popularity or happiness.

### Social NPC Attributes

Knowledge in:  
Fashion, Music, TV

Tolerance

Location Preferences

Refinement

Drug Preferences  
and tolerance

Expectations on  
partner

Health

Looks

Demand on popularity  
of friends

Popularity

Relation to others

### Events that propel change

"Hanging out"

Cheerleader  
Takeouts

House Parties -  
getting too drunk

Dating NPC/PC

Being the subject  
of Gossip

Dark Secret Revealed

Cheerleader of the  
Week votes

Being seen at the  
club

Social Interaction  
NPC-NPC, PC-NPC

Having sex

## Non Player Characters

The non-player characters are designed to primarily seek popularity in order to climb the social hierarchy. This affects most decisions, unless their personality properties overrule seeking popularity - for example the need for a boy- or girl friend may override the need for popularity.

The class mates are modeled with roughly 25 different attributes describing both actual properties and properties representing the what others think of them. These properties mutate through non-player character interactions and player - npc interactions.

Some of these properties determine the character's knowledge within music, fashion and television. Other properties are used to give a distinct personality (or lack thereof) to characters. These for example determine how "preppy" or "rebellious" the character is - which determines how likely the agent is to purchase alcohol, show up drunk or be rude.

Properties also determine more static attributes, such as the looks, social skill and other abilities of the character.

The player's class mate Sandy has chosen the game move Gossip during a dialog at the mall, stating that the drop out Rory is cool. The player can choose to agree or disagree. Doing either will influence the relation with Sandy - and influence Rory's reputation if the player, or Sandy are popular enough to influence the common attitude in class.

