## **Social Interaction Type**: BigBrothapp

#### Description

Application's Top Interaction. You may take into account that the application encloses both house (nominations) and audience (votation) issues.

Attribute	
< <local>&gt; winner</local>	This keeps the contest's winner. Notice that it will only hold a value at the end of the reality show, when a contestant is the
< <type>&gt; Contestant &lt;<cardinality>&gt; 01</cardinality></type>	last one standing in the house.
	< <monitoringrule>&gt;</monitoringrule>
	All the roles in the system will be notified when this attribute changes (which is supposed to happen only once). Why so many notifications? At the end, the major concern in a contest is who won it!

Restrictions	
< <sub>&gt;</sub>	
House	The house where the contestants will be isolated.
Audience	The place where the audience members live.
< <members>&gt;</members>	
Contestant	People who will enter the house in order to win the prize.

Life-cycle	
< <initiate>&gt;</initiate>	An instance of this interaction is deployed at the very beginning
	and will be alive as long as the system exists.

#### **Agent Type**: Contestant

#### Description

This is a person who aims to win the prize of the contest. It has already been selected to enter the house, but it will remain alive after his eviction if any (to attend an interview, to chat with the audience...)

Restrictions	
< <context>&gt;</context>	
BigBrothapp	This agent lives in the top interaction, just because we want to
	keep him on track, even if he is evicted from the house.
< <role>&gt;</role>	
Housemate	Inhabitant of the house. This role will be effective until he leaves
	the house, whether winning or suffering an eviction.

Life-cycle	
< <play>&gt;</play>	An instance of this agent is automatically started for each
	contestant joining the show.

### **Social Interaction Type**: House

#### Description

The isolated location where the contestants coexists. The house will start with all the housemates (12-16) living in. As time passes and one by one, they will be evicted from the site.

Restrictions	
< <context>&gt;</context>	
BigBrothapp	The Big Brotha edition which uses this house as the place to record the show.
< <sub>&gt;</sub>	
Eviction	The eviction processes that the BigBrother setup, in order to
	evict one housemate.
< <participant>&gt;</participant>	
Contestant	This plays the Housemate role.
< <members>&gt;</members>	
BigBrother	The eye that sees it all.
Housemate	The contestant that joins the house.
< <actions>&gt;</actions>	
SetUpEviction	Starts a new eviction process (think of each two weeks a
	contestant must be evicted)

Life-cycle	
< <initiate>&gt;</initiate>	An instance of this interaction is deployed at the very beginning.
< <finish>&gt;</finish>	The house closes when all the housemates abandon the house.

#### **Agent Type**: Housemate

#### Description

The contestant who lives in the Big Brotha house. The purpose of this agent is to be the last one standing in the house and so, win the contest. Because of that, one of the major concerns regarding this entity is the nomination.

Restrictions	
< <context>&gt;</context>	
House	As implied by its name, a housemate lives in the house.
< <player>&gt;</player>	
Contestant	The Big Brotha contestant plays this role.
< <role>&gt;</role>	
Nominee	He can be nominated to be evicted from the house.
Nominator	He can nominate other housemates in order to get them evicted
	from the house.
< <perform>&gt;</perform>	
Nomination	At a regular basis, a housemate nominates other contestant to
	evict from the house.
LeaveHousemate	The housemate leaves the house (he could not support the
	pressure)

Life-cycle	
< <play>&gt;</play>	An instance of this agent is automatically started for each contestant joining the show.
< <abandon>&gt;</abandon>	This role is abandoned automatically when a votation process is over, resulting in his eviction. Besides, this role abandons if he is the last one standing in the house, so he has become the winner.

Social Actions		
< <leavetype>&gt;</leavetype>		
< <empowerment>&gt;</empowerment>	A housemate can leave if there is not a current eviction process in "nomination" substatus.	
< <pre>&lt;<permission>&gt;</permission></pre>	true	
< <firetype>&gt;</firetype>		
< <empowerment>&gt;</empowerment>	The BigBrotha can fire a housemate if there is not a current eviction process in "nomination" substatus.	
< <pre>&lt;<permission>&gt;</permission></pre>	true	

## **Agent Type**: BigBrotha

#### Description

The eye that sees it all, the boss in the house. He is not joining the contest. Instead he is empowered to take important decisions regarding the house flow.

Restrictions	
< <context>&gt;</context>	
House	The Big Brotha is somewhere in the house, but housemates cannot see him.
< <perform>&gt;</perform>	
FireHousemate	Fires a housemate from the house.
SetUpEviction	Starts a new eviction process.
DeclarePhase	Changes the current eviction phase ("nomination", "votation", "result").

Life-cycle	
< <play>&gt;</play>	An instance of this agent is automatically started at the very
	beginning.
< <abandon>&gt;</abandon>	The Big Brotha is abandoned when the house finishes.

### **Social Interaction Type**: Audience

#### Description

Big Brothapp has a lot of fans. In fact the show format empowers them to make important decisions, such as evictions. This is the place where all the show's viewers live.

Restrictions	
< <context>&gt;</context>	
BigBrothapp	The audience is associated to an edition of the program.
< <members>&gt;</members>	
Viewer	An audience member, a show follower.

Life-cycle	
< <initiate>&gt;</initiate>	An instance of this interaction is deployed at the very beginning
	and will be alive as long as the system exists.

## Agent Type: Viewer

#### Description

A person who is interested in receiving the last news regarding the show. Besides, he has a main duty in the show: he can cast a vote in order to choose which housemate should be evicted.

Restrictions	
< <context>&gt;</context>	
Audience	A viewer is an audience's member.
< <role>&gt;</role>	
Voter	This agent is empowered to cast an eviction vote.
< <perform>&gt;</perform>	
Vote	An eviction vote.

Life-cycle	
< <play>&gt;</play>	By now, to make the application easier, some viewers will be
	deployed at the very beginning of the show.

## **Social Interaction Type**: *Eviction*

#### Description

A regular process that is created at a regular basis to eliminate a housemate. It has three phases: nomination, votation and results.

Restrictions		
< <substate>&gt;</substate>		
Nomination	housemates who get t	ates should nominate each other. The he highest number of nominations (at are candidates to be evicted from the
Votation	house.	es to select the housemate they want to
Results	The nominee who gets house.	the majority of votes is evicted from the
		< <declaretype>&gt;</declaretype>
	< <empowerment>&gt;</empowerment>	If the performer is the Big Brother, the current phase is "Votation", and the value to set is "Results".
	< <pre>&lt;<permission>&gt;</permission></pre>	true
		< <rules>&gt;</rules>
	If the attribute is set to "Votation", the nominator roles	
	abandon the nominations, as well as the nominee and its	
	associatea interac	tion if he does not appear in the most nominated ones.
	If the attribute i	s set to "Results", the votes must be
	counted in order to determine which housemate must	
		e. All the entities hanging from Eviction,
		f will be removed from the system.
		< <monitoringrule>&gt;</monitoringrule>
	Every modification of	of this attribute will be notified to all the
		agents in the system.
< <context>&gt;</context>		
House	The evictions are achie	eved in the house.
< <sub>&gt;</sub>		
Nomination	A Nomination subinter	raction will be created for each contestant

Life-cycle	
< <finish>&gt;</finish>	Once all the nominations are removed, this eviction finishes.

<b>Social Actions</b>		
< <setuptype>&gt;</setuptype>		
< <empowerment>&gt;</empowerment>	If the performer is the Big Brotha and there are not other eviction processes opened.	
< <pre>&lt;<permission>&gt;</permission></pre>	true	

#### **Social Interaction Type**: *Nomination*

#### Description

A place to nominate. Each nomination is associated to a housemate who plays the Nominee role here. The nomination action is achieved by another housemate joining this location as a Nominator. Once all the housemates have nominated another one, most of this interaction will be removed, remaining only the ones associated to the housemates with the highest number of nominations. Then, the Viewers are empowered to vote, choosing the person who they want to see outside the house.

Restrictions	
< <context>&gt;</context>	
Eviction	A nomination makes sense in an eviction process.
< <participant>&gt;</participant>	
Housemate	Whether as a Nominee or as a Nominator.
Viewer	As a Voter.
< <members>&gt;</members>	
Nominee	The person who takes the nomination.
Nominator	The person who nominates to this nominee.
Voter	The person who votes this nominee.

Life-cycle	
< <initiate>&gt;</initiate>	A Nomination is started when a new eviction is created.
< <finish>&gt;</finish>	This is closed when the Eviction phase is set to results.

# **Agent Type**: Nominee

# Description

A housemate taking nominations.

Restrictions	
< <context>&gt;</context>	
Nomination	This lives inside his associated Nomination. There can only be one Nominee in a Nomination.
< <player>&gt;</player>	
HouseMate	The housemate that can be nominated by the rest of them.

Life-cycle	
< <play>&gt;</play>	This is automatically created when an Eviction process is
	deployed.
< <abandon>&gt;</abandon>	This is abandoned either if the nominee is not between the most
	nominated housemates or when the Votation phase finishes.

## Agent Type: Nominator

### Description

A housemate nominating another one. This will live in the Nomination interaction owned by the Nominee.

Restrictions	
< <context>&gt;</context>	
Nomination	The Nomination associated to the Nominee.
< <player>&gt;</player>	
Housemate	The housemate who is nominating another one.

Life-cycle	
< <abandon>&gt;</abandon>	This role is abandoned automatically when the Eviction process
	moves phase to "Votation".

Social Actions		
< <jointype>&gt;</jointype>		
< <empowerment>&gt;</empowerment>	If the Eviction process is in "Nomination" status and the	
	performer, a housemate, has not casted a nomination yet.	
< <permission>&gt;</permission>	true	

# Agent Type: Voter

### Description

A viewer who wants to see one of the nominated evicted from the house.

Restrictions	
< <context>&gt;</context>	
Nomination	A voter lives in the interaction associated to the nominee he
	desires to see evicted from the house.
< <player>&gt;</player>	
player	This is played by the Viewer, an audience member.

Life-cycle	
< <abandon>&gt;</abandon>	A voter is abandoned as soon as the votation's results are ready.

Social Actions		
< <jointype>&gt;</jointype>		
< <empowerment>&gt;</empowerment>	If the viewer casts the vote in the "votation" phase.	
< <pre>&lt;<permission>&gt;</permission></pre>	true	