***Warning***: This is a **very** old document and is unreliable. It's probably best to read the Chapter 2 GameKit docs and the header files¼and you'll be *much* better off!

## GameBrain

| | |
|---|---|
| INHERITS FROM | Object |
| DECLARED IN | GameBrain.h |

CLASS DESCRIPTION

A GameBrain serves as the "distributor cap" that ties together a game application. It acts as delegate to the Application class and is also the delegate to the game's main window. It handles housekeeping chores like updating the menus (pause/unpause), handling auto pause/unpause, updating the "statistics" window, and tracking the player's score.

To use a GameBrain, you must hook it up to the various parts of the game interface. First, it should be the delegate of the main game window and the delegate of the Application. Next, it needs to be connected to a HighScoreTable object, a PreferencesBrain object, and a subclass of GameView. Finally, you should hook up any applicable interface elements, notably the pause/unpause menu button, the text fields to hold the level, score and current high score, and a PlayerUpView object. If your particular game doesn't require one of these interface elements, just leave it out. (Or delete the element from the generic game priovided with this

distribution.)

You probably won't need to make a subclass of the GameBrain; typically a game is defined by subclassing the GameView and GameActor classes. However, often it does make sense to add certain functions to the GameBrain rather than one of the other classes, such as tracking bonuses, user registration hooks, and so on. For examples of these, see the source code for PacMan and Columns, respectively.

## INSTANCE VARIABLES

| | | |
|---|---|---|
| *Inherited from Object* | Class | isa; |
| *Declared in GameBrain* | int | score, level, speed; |
| | int | pointsToNextBonus, lastBonus; |
| | BOOL | paused, ranOnce; |
| | id | alert; |
| | id | levelText, topScoreText, scoreText; |
| | id | pauseMenuCell; |
| | id | soundPlayer; |
| | id | infoController; |
| | id | preferencesBrain; |
| | id | highScoreTable; |
| | id | gameScreen; |
| | id | gameWindow; |

| | |
|---|---|
| score | Player's score. |
| level | Current level of play. |
| speed | Current speed of game. |
| pointsToNextBonus | How many point the player needs to score until the next free "man". |
| lastBonus | Points the player had when the most recent free "man" was awarded. |

| | |
|---|---|
| paused | Whether or not the game is paused. |
| ranOnce | Whether or not the player actually played a game. This allows us to "complain" if the app was launched but never used. |
| alert | An alert panel ("loading images") put up while the app initializes. |
| levelText | Textfield that contains the player's current level of play. |
| topScoreText | Textfield that contains the current highest score. |
| scoreText | Textfield that contains the player's current score. |
| pauseMenuCell | The "Pause" cell in the Main Menu. |
| soundPlayer | A SoundPlayer object (coordinates playback of several sounds). |
| infoController | An InfoController object (coordinates the Info menu stuff). |
| preferencesBrain | A PreferencesBrain object (preferences tracker). |
| highScoreTable | A HighScoreTable object (high score tracker). |
| gameScreen | A GameView subclass. |
| gameWindow | The main game window. |

METHOD TYPES

| | |
|---|---|
| Initialization | - init |
| Scoring | - zeroScore<br>- addToScore:<br>- showHigh |
| Pause Control | - pause<br>- unpause<br>- paused |

| | |
|---|---|
| | - pauseGame:<br>- unpauseGame: |
| Game Control | - startNewGame:<br>- gameOver<br>- gameOver:<br>- nextLevel:<br>- level<br>- speed<br>- quit: |
| Window Delegate | - windowDidResginMain:<br>- windowDidResignKey:<br>- windowDidBecomeKey:<br>- windowDidMove: |
| Application Delegate | - appWillInit:<br>- appDidInit:<br>- appDidBecomeActive:<br>- appDidHide:<br>- appDidUnHide:<br>- appDidResignActive:<br>- appDidWillTerminate: |

INSTANCE METHODS

- addToScore:
- appDidBecomeActive:
- appDidHide:
- appDidInit:
- appDidResignActive:
- appDidUnHide:
- appDidWillTerminate:
- appWillInit:

- gameOver
- gameOver:

**init**

- **init**

Designated initializer for the GameBrain. Sets up various instance variables. Returns **self**.

**level**

- (int)**level**

Returns the level.

See also: **± nextLevel:**

**nextLevel:**

- **nextLevel:***sender*

Moves the game to the next level. A subclass may be required to add extra functionality to this method. Don't forget to call the **super** method if you do this. Returns **self**.

See also: **±level**

- pause
- paused
- pauseGame:
- quit:
- showHigh
- speed
- startNewGame:
- unpause
- unpauseGame:
- windowDidResginMain:
- windowDidResignKey:

- windowDidBecomeKey:
- windowDidMove:
- zeroScore