

MiscRandom

Inherits From: NSObject
Declared In: MiscRandom.h

Class Description

The MiscRandom class provides services for random number generation and die rolling. It implements its own random number generator with a cycle length of 8.8 trillion.

The algorithm used by the MiscRandom class is that given in the article: *^aA Higly Random Random±Number Generator^o* by T.A. Elkins Computer Language, Volume 6, Number 12 (December 1989), Pages 59-65
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Method Types

Initializing	<ul style="list-style-type: none"> - init - initSeeds:::
Determining the seeds	<ul style="list-style-type: none"> - newSeeds - setSeeds::: - getSeeds:::
Asking random numbers	<ul style="list-style-type: none"> - rand - randMax: - randMin:max: - percent - rollDie: - roll:die: - rollBest:of:die:

Instance Methods

getSeeds:::

- **getSeeds**:(int *)s1 :(int *)s2 :(int *)s3

Puts the values of the seeds into the integer variables pointed to.

init

- **init**

Initializes the Random with seeds from the milliseconds count of the system clock (uses **newSeeds**).

initSeeds:::

- **initSeeds**:(int)s1 :(int)s2 :(int)s3

Initializes the Random with the seeds given (uses **setSeeds:::**).

newSeeds

- **newSeeds**

Sets the seeds from the milliseconds count of the system clock.

percent

- (float) **percent**

Returns a float in the range [0.0, 1.0].

rand

- (int)**rand**

Returns an int in the range [0, 32767].

randMax:

- (int)**randMax**:(int)*max*

Returns an int in the range $[0, \text{max}]$.

randMin:max:

- (int)**randMin**:(int)*min* **max**:(int)*max*

Returns an int in the range $[\text{min}, \text{max}]$.

roll:die:

- (int)**roll**:(int)*numRolls* **die**:(int)*numSides*

Returns an int in the range $[\text{numRolls}, \text{numRolls} * \text{numSides}]$

rollBest:of:die:

- (int)**rollBest**:(int)*numWanted* **of**:(int)*numRolls* **die**:(int)*numSides*

Returns the sum of the best *numWanted* rolls.

rollDie:

- (int)**rollDie**:(int)*numSides*

Returns an int in the range $[1, \text{numSides}]$.

setSeeds:::

- **setSeeds**:(int)s1 :(int)s2 :(int)s3

Sets the seeds to the values given.