Class Chromosome

class **Chromosome**

This class gives the attributes and methods to create and manipulate the datatype Chromosome .

The documentation for the methods contained in this class includes briefs description of the *implementations*. Such descriptions should be regarded as *implementation notes*, rather than parts of the *specification*. Implementers should feel free to substitute other algorithms, so long as the specification itself is adhered to.

Parameters for the constructer:
- **int** *num_genes* :- This parameters specifies number of genes in the chromosome as defined by the user.

Attributes of the class:
- public Object[] chromosome – contains the genes of the chromosome.
- double fitness – contains the fitness of the chromosome calculated by calcFitness.

Method Summary

Public Object	**getObject(int index)** Returns the Object at the index in the chromosome.
Public void	**setObject(int index, Object Value)** Changes the value of the gene at index of the chromosome to Object Value.
Public double	**getFitness()** Returns the attribute fitness of the chromosome.
Public void	**setFitness(double value)** Rewrites fitness to the value given.
Public void	**incFitness(double value)** Increases the value of fitness by the value given.

Method Detail

getObject

```
public Object getObject(int index)
```

Returns the Object present at the index of value 'index' in the chromosome.

Parameters:

`index- index of the gene.`

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setObject

`public void `**`setObject`**`(int index, Object value)`

Rewrites the gene at the gene of index 'index' of the chromosome to the Object value.

Parameters:

`index` - the index of gene.

`value` –the Object to be written.

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getFitness

`public double `**`getFitness()`**

This function returns the fitness of the chromosome.

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setFitness

`public void `**`setFitness`**`(double value)`

Rewrites the value of fitness to the value given.

Parameters:

`value` – the value to be written.

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incFitness

`public void `**`incFitness`**`(double value)`

increases the value of fitness by the value given.

Parameters:

`value` –the value by which the fitness is to be increased.