labo_08_gachet_jean_gallay_david

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- #define DEAD false
- #define ALIVE_CHAR 'X'
- #define DEAD_CHAR 'O'

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- void computeMultipleGens (bool currentGen[HEIGHT][WIDTH], unsigned n, bool autoStop=true)
- void displayGame (const bool game[HEIGHT][WIDTH])
- void preFillGame (bool game[HEIGHT][WIDTH])

2.1.1 Macro Definition Documentation

2.1.1.1 ALIVE

```
#define ALIVE true
```

2.1.1.2 ALIVE_CHAR

```
#define ALIVE_CHAR 'X'
```

2.1.1.3 DEAD

```
#define DEAD false
```

2.1.1.4 DEAD_CHAR

```
#define DEAD_CHAR 'O'
```

2.1.1.5 HEIGHT

```
#define HEIGHT 9
```

2.1.1.6 WIDTH

```
#define WIDTH 9
```

2.1.2 Function Documentation

2.1.2.1 computeMultipleGens()

```
void computeMultipleGens (
            bool currentGen[HEIGHT][WIDTH],
            unsigned n,
            bool autoStop = true )
```

Take a game and computes the n next generations (stops if a stable state is reached). Displays the game after each generation.

Parameters

currentGen	[IN] current state of the game [OUT] new state of the game
n	number of generations to compute
autoStop	stops if no more changes are detected between generations

2.1.2.2 computeNextGen()

```
bool computeNextGen (
            bool currentGen[HEIGHT][WIDTH] )
```

Take a game and computes the next generation.

Parameters

currentGen	[IN] current state of the game [OUT] new state of the game

Returns

if a change occured

2.1.2.3 displayGame()

```
void displayGame (
            const bool game[HEIGHT][WIDTH] )
```

Display the game.

Parameters

game	

2.1.2.4 preFillGame()

```
void preFillGame (
            bool game[HEIGHT][WIDTH] )
```

Prefills the game with dead cells.

Parameters

game	Bi-dimensional bool array

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