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3 Game of Life {

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5 [IS247 Final Project]

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9 < By: Marilyn Nguyen & Zelda Miller >

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What is the Game of Life;

Invented in 1970, John Horton Conway developed a mathematical model and simulation that demonstrates a cellular automation called “The Game of Life”.

< This 2D simulation also utilizes Java Model View Controller framework to conduct regulations and operations. >



About The Game {

[First]

This game begins by producing an initial configuration of a group of cells and observes how the group evolves in formation as it moves through the grid.

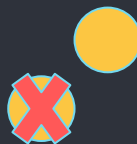
}

The Four Rules {

[Rule #1: Underpopulation]

Any living cell with fewer than two live neighbors around it dies.

}



The Four Rules {

[Rule #2: Overpopulation]

Any cell with more than three live neighbors around it dies.



The Four Rules {

[Rule #3: Survival]

Any cell with two or three live neighbors lives on.



}

The Four Rules {

[Rule #4: Birth]

A new cell or dead cell can come to life when it has three live neighboring cells around it.



Implementing MVC {

01

Model Class

Encapsulates the game's logics. Manages the grid state and applies rules for cell evolution for each generation.

02

View Class

Represents the graphical user interface. Displays the grid and visualizes the cell states.

03

Controller Class

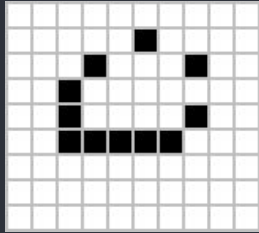
An intermediary between the model and view class. Receives user input from the view class and updates the model accordingly.

}

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Different Patterns of the Cell

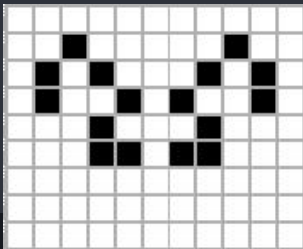
Shape #3 < The Spaceship >



Shape #4 < The Exploder >

Shape #5 < The 10 Row Cell >

Shape #6 < The Tumbler >



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< Time for a demo of
our code! >