**Criterion B – Design**

The main elements of the program:

* Dialog boxes & Options
* GUI
* Draw Methods

**Dialog boxes & Options**

The program will have a layout of multiple DialogBoxes and Windows in a sort of branching layout, as clicking on option on the Main Menu will lead to another with its own unique set of options that includes CheckBoxes and RadioButtons to diversify the randomness of the following GUI image that is produced.

**GUI**

Not only is the entire program using GUI as a layout to directly interact between the client and server to produce output, but the final output is produced using GUI drawing methods of the Graphics class.

**Draw Methods**

The Graphics class utilizes pixel placement and shape and geometric formations to produce images on a JFrame. Options such as color, placement, and size are all controlled by the parameters of the Draw Method and is therefore controlled by the Options of the Dialog boxes.

The following are events that will **trigger** program processes:

|  |  |
| --- | --- |
| **Action to test** | **Method of Testing (Process)** |
| Program opened | Load interface of Main Menu |
| -Click *Randomness* | Load interface of DialogBox of Randomness |
| -Click *Geometric mess* | Load interface of DialogBox of Geometric mess |
| --Click *Gotye* | Load interface of DialogBox of *Gotye* |
| --Click *AM* | Load interface of DialogBox of *AM* |
| -Click *Gradient Shift* | Load interface of DialogBox of *Gradient Shift* |
| Click **Create Image** | Produce GUI Graphics output based on options chosen in the corresponding DialogBox. |
| Click **Back** | Load interface of Main Menu |

**Diagram 1: Interface Branch**

