Object Oriented Programming (pew pew pew)

First find an image of an asteroid and save it you your user area.



Create a new Forms Project and called is Pew

Lets add the image to the project, go to the top menu and use “Project”, “Pew Properties” and click on “Resources” on the left, then “Add Exisiting File” to add the image:

A computer screen capture

Description automatically generated with medium confidence

Use the menu for “Project” and “Add Class”. Create a class called Asteroid:

Graphical user interface, application

Description automatically generated

In this new class we need to add some Private Attributes for the velocity and the PictureBox. To use PictureBoxes and to draw them we need to add some libraries at the top. We also need a constructor to create this Asteroid Object. We will also declare a random type so a random velocity later.

In the Constructor we will set the velocity using a random range, then create a new PictureBox and set its size and position using parameters passed into the constructor. Obviously the image will be our graphics we added to the project. We will stretch the image to fit the box and VERY IMPORTANT is to add it to the Form using Controls.Add:

Graphical user interface, text, application

Description automatically generated

We also need some code to make the Asteroid move:

Graphical user interface, application

Description automatically generated

Now lets return to the main program

Again we need to add some libraries ot the top. We can also make an empty array to hold our Asteroids.

A computer screen capture

Description automatically generated with medium confidence

Now we need to call this Constructor when we click the form. On the form, go to the properties window and select the Lightning Icon for Events:

A computer screen capture

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Type in a name for the procedure and when you press return it will take you to the code structure for you to complete:

A computer screen capture

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This code will create a local variable called boulder and use the Constructor to create our Asteroid at the mouse location, then resize our array and add the item to the end of the array.

Next we need a timer to tick away in the background.

Drag a timer onto the form, then go to the properties and set it to Enabled YES, Interval 10 and go to Events and type in a name for the procedure:

Graphical user interface, application

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Now add some code that will loop through the array of Asteroids Moving each one:

A computer screen capture

Description automatically generated with medium confidence

Test it, and yay we have a little program that makes an Asteroid Field by placing Asteroids where we click.