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Visual Programming

Visual programming is a method to program an application without the need to learn a programming language like C++ or python.

So instead of write tens or hundreds of code lines, you can use the visual programming to make your application by the feature of drag and drop which will help you to add what you need in your application.

Features of visual basic:

- Graphical interface, it uses blocks and icon instead of codes, which will help users to make their projects easily.
- Drag and drop, this feature will allow users to easily select an object and place it somewhere.

- Friendly, it's very easy for people that don't have a background about the programming language or they don't know any programming language.
- Reduce syntax error, you don't have to memorize the complex syntax, everything easy to understand and memorize.
- Fast development, it's easy to develop an application in a short time.

Visual basic

Visual basic is a part of Visual Studio suite, created by Microsoft, and it's a programming language with an environment, it supports a graphical interface for users to build their applications easily, so users don't have to write codes with a black background, they just need to drag and drop the elements.

Features of visual basic:

- Event-driven programming, the code will run if some events occur like (button click).
- Drag and drop, this feature will help the users to drag and drop their UI elements in their projects, which is much easier than make it as a code.
- Rapid application development, the user can develop an application in a very short time.
- Integrated development environment (IDE), the visual programming environments come with an IDE.
- Database connectivity, easy to connect your database like: MS Access and SQL server.

Visual basic tools:

- Toolbox: contains UI objects like buttons and textboxes, the user can drag and drop them.
- Form designer: the space where the users can design their application and drop the objects.
- Code editor: here the user can write logic for their application, it supports auto complete and syntax error highlighting.
- Properties: this allows the users to edit the size, color and text of UI elements.
- Solution explorer: this will display all files and directory for the user which will help him to navigate through their directories.
- Debugging tools: it has features like breakpoints and watch windows.
- Data control: used to connect to databases (SQL server, ADO.NET).

Events:

The events are actions that can occur while the application is running and it make the application interactive and usable, this can be either user generated like mouse clicks or system generated like timer.

Types of events:

Mouse events: like click, double click, mouseEnter (When the mouse moves over a control), mouseLeave (When the mouse moves away from a control).

Keyboard events: key down (a specific key is down), key press (When a key is pressed and released), key up (When a key is released).

Form events: load (When the form loads for the first time), closing (When the form is about to close), resizing (When the form size changes).

Timer events: tick (Runs when the timer interval is reached).