

Dynamically Typed Variables

What

- › Dynamically Typed Variables are the variables that are declared with 'dynamic' keyword.
- › Declared without specifying the type explicitly.
- › There is no fixed type for the variable.
- › You can assign any type of value to these variables.
- › C# compiler skips "type-checking" at compilation time; instead, it resolves the data types of its values, at run time.

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```
dynamic variableName = value;
```



- › The "dynamic" type variables are converted as "object" type in most cases.
 - › `dynamic dynamicVariable = 100;` → `object dynamicVariable = 100;`
- › The Dynamically Typed Variable can change its data type, any no. of times, at run time.
- › Methods and other members of 'dynamically typed variables' will not be checked by the compiler at compilation time; will be checked by CLR at run time.
 - › If the method or other member not available, it would not cause compile-time error; it raises run-time error, when the execution flow encountered that particular statement.
 - › `dynamicVariable.NonExistingMethod();` **//run-time error (exception)**
- › The Dynamically Typed Variables need not be initialized, while declaration.
- › The Dynamically Typed Variable doesn't have "Intellisense" in Visual Studio.
- › The "dynamic" keyword is allowed for local variables, method parameters, fields, properties, return types etc.