

What is Flutter?

Flutter is a rapidly evolving framework for building cross-platform applications on iOS, Android, web, and desktop from a single codebase.

Advantages of Flutter:

- **Single Codebase:** Reduces time and cost with one codebase for all platforms.
- **Faster Development:** Hot reload speeds up coding and testing.
- **High Security:** Features null-safety and isolated execution environments.
- **Native-Like Performance:** Powered by the Skia engine for smooth performance.
- **Customizable UI:** Offers Material Design and Cupertino widgets for platform-specific aesthetics.
- **Powerful Language:** Dart's AOT and JIT compilers enhance app performance and flexibility.

Recourses

<https://waverleysoftware.com/blog/why-use-flutter-pros-and-cons/>

in Dart, control flow statements are used to control the flow of execution of a program. The following are the main types of control flow statements in Dart:

- **if-else:** used to conditionally execute code based on a Boolean expression.

Example :

```
if (isOpen())  
{  
  enter();  
}  
else {  
  ringTheBello();  
}
```

- for loop: used to repeat a block of code a specific number of times.

Example :

```
// For loop Example
```

```
for(var i = 0; i<3; i++){  
    print(i);  
}
```

```
// For-in loop Example
```

```
List list1 = [1,2,3,4,5,6];  
  
for(var item in list1){  
    print(item);  
}
```

- while loop: used to repeat a block of code as long as a given condition is true.

Example :

```
while(doorIsOpen()){  
    doSomething();  
}
```

- do-while loop: similar to the while loop, but the block of code is executed at least once before the condition is evaluated.

Example :

```
do{  
    doSomething();  
}while(doorIsOpen());
```

- switch-case: used to select one of several code blocks to execute based on a value.

Example :

```
var result = 'LOADED';  
  
switch(result){  
    case 'LOADING':  
        executeLoading();
```

```
    break;
case 'LOADED':
    executeLoaded();
    break;
default:
    executeUnknown();
}
```

- break: used to exit a loop early.

Example :

```
while(true){
    if(doorIsOpen()) break;
    doSomething();
}
```

- continue: used to skip the current iteration of a loop and continue with the next one.

Example :

```
for(var i = 0; i<4; i++){
    if(item < 2) continue;
    print(item);
}
```

Resources

<https://medium.com/@MrArc/dart-control-flow-statements-d2d6005604>

<https://roadmap.sh/flutter/dart-basics/control-flow-statements>