Error handling

Error handling in Dart is done using try, catch, and finally blocks. Here's a basic overview of how you can use them:

- 1. **Try Block**: Contains the code that might throw an error.
- 2. Catch Block: Handles the error if one occurs.
- 3. Finally Block: Contains code that runs regardless of whether an error occurred.

Here's an example:

```
void main() {
  try {
    // Code that might throw an error
    int result = 10 ~/ 0; // This will throw a DivisionByZeroError
    print(result);
} catch (e) {
    // Code that runs if an error occurs
    print('An error occurred: $e');
} finally {
    // Code that always runs
    print('This always runs.');
}
```

Types of Errors

- 1. **Exception**: An object that represents an error or exceptional condition.
- Error: Represents a problem that is generally not meant to be caught, such as OutOfMemoryError.

Catching Specific Exceptions

You can catch specific types of exceptions:

```
void main() {
  try {
    // Code that might throw an error
    int result = 10 ~/ 0; // This will throw a DivisionByZeroError
```

```
print(result);
} on IntegerDivisionByZeroException {
   // Handle specific exception
   print('Cannot divide by zero.');
} catch (e) {
   // Handle all other exceptions
   print('An error occurred: $e');
}
```

Custom Exceptions

You can define your own exceptions by extending the Exception class:

```
class CustomException implements Exception {
  final String message;
  CustomException(this.message);

  @override
  String toString() => 'CustomException: $message';
}

void main() {
  try {
    throw CustomException('Something went wrong.');
  } catch (e) {
    print(e);
  }
}
```

This is a basic introduction, but Dart's error handling allows for quite a bit of flexibility depending on what you need!