

Exception	Description
Exception	Superclass of all exceptions.
ArgumentOutOfRangeException	Parameter is not in allowed range.
ArgumentNullException	Parameter is null while it shouldn't be.
ArgumentException	Superclass of exceptions dealing with parameters.
InvalidOperationException	Object is in a state, that does not support call of given method. It is not a parameter issue. Context and description of the exception is important.
NullReferenceException	Attempt to access to (dereference) a null.
StackOverflowException	The stack has overflowed.
IOException	Superclass of exceptions related to streams or file system.
DbException	Superclass of exceptions related to database.
KeyNotFoundException	Given key is not present in the collection.
ObjectDisposedException	There has been an operation on disposed object.
WebException	Network access error.

Exception	Throw?	Catch?
Exception	No, only runtime should throw this.	Yes, but it must be immediately rethrown or the program should gracefully terminate.
ArgumentOutOfRangeException	Yes	No, it typically indicates developer error.
ArgumentNullException	Yes	No, it typically indicates developer error.
ArgumentException	Rather not, better use a subclass.	No, it typically indicates developer error.
InvalidOperationException	Yes	No, it typically indicates developer error.
NullReferenceException	No, only runtime should throw this.	No, it typically indicates developer error.
StackOverflowException	No, only runtime should throw this.	Cannot be caught, program instantly terminates.
IOException	Rather not, better use a subclass.	Yes
DbException	No, it is an abstract class.	Yes
KeyNotFoundException	Yes, but only for specialized classes.	No, it typically indicates developer error.
ObjectDisposedException	No, only runtime should throw this..	No, it typically indicates developer error.
WebException	Yes, but only for specialized classes.	Yes

Exception	Use case scenario	
Exception	(Catch) Logging of catastrophic or unknown error.	
ArgumentOutOfRangeException	(Throw) Checking the parameter "hour", which has integer values from interval (0;24).	(Throw) Checking the parameter "index" which must be non-negative integer.
ArgumentNullException	(Throw) Checking the parameter "magicService", which must not be null.	
ArgumentException	(Throw) Checking the parameter "endpointName", which must be defined in configuration file.	(Throw) Checking the parameter "path", which must be nonempty string.
InvalidOperationException	(Throw) Checking the method "Sender.SendMessage", which requires that object of class "Sender" must be in state "SenderState.Opened".	
NullReferenceException		
StackOverflowException		
IOException	(Catch) Logging and resources disposal.	(Catch) Wait a moment and try the operation again.
DbException	(Catch) Logging and resources disposal.	(Catch) Wait a moment and try the operation again.
KeyNotFoundException		
ObjectDisposedException		
WebException	(Catch) Logging and resources disposal.	(Catch) Wait a moment and try the operation again.