

Exception Handling in C++

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Ashwini R Patil

IIT Bombay

8 August 2012



Learning Objectives



Learning Objectives

► Exception Handling



Learning Objectives

- ▶ **Exception Handling**
- ▶ **Through an example**



System Requirements



System Requirements

- ▶ **Ubuntu OS v. 11.10**



System Requirements

- ▶ **Ubuntu OS v. 11.10**
- ▶ **g++ Compiler v. 4.6.1**



Introduction to Exception



Introduction to Exception

- ▶ An exception is a problem that arises during the execution of a program



Introduction to Exception

- ▶ **An exception is a problem that arises during the execution of a program**
- ▶ **It is a run-time error that a program may detect**



Introduction to Exception Handling



Introduction to Exception Handling

- ▶ The response given to the problems occurred during the execution of the program



Introduction to Exception Handling

- ▶ The response given to the problems occurred during the execution of the program
- ▶ Exception handling allows program to continue execution



Introduction to Exception Handling

- ▶ The response given to the problems occurred during the execution of the program
- ▶ Exception handling allows program to continue execution
- ▶ Helps identifying the problem



Introduction to Exception Handling

- ▶ The response given to the problems occurred during the execution of the program
- ▶ Exception handling allows program to continue execution
- ▶ Helps identifying the problem
- ▶ Terminates the program in a controlled manner



Types of Exceptions



Types of Exceptions

► **try**



Types of Exceptions

- ▶ **try**
- ▶ **catch**



Types of Exceptions

- ▶ **try**
- ▶ **catch**
- ▶ **throw**



Syntax



Syntax

► **throw;**

try

{ //try blocks starts

.....

} //try block ends

catch (arg)

{ //catch block starts

.....

} //catch block ends



Summary

- ▶ **Exception Handling**
- ▶ **try**
- ▶ **catch**
- ▶ **throw**



Assignment

- ▶ Display the age of employees
- ▶ Throw an exception to check that the age is not less than 15
- ▶ Now try to execute the same program by removing the try-catch block



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Acknowledgements

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at:**

<http://spoken-tutorial.org/NMEICT-Intro>

