Lecture Zero

Course Information

© **Dr. Mohammad Mahfuzul Islam, PEng**
Professor, Dept. of CSE, BUET

Course Teacher & Class Time

- **Course Teacher**

Part A
(C++ and Java)
(7 Weeks)

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Part B (Java)
(7 Weeks)

Dr. Rifat Shahriyar
Professor, CSE, BUET

- **Class Time Table**

Section A		
Day	**Time**	**Room#**
Sat	9am~10 am	107
Sun	11am~12 am	
Wed	10am~11 am	

Section B		
Day	**Time**	**Room#**
Sat	11am~12pm	108
Sun	10am~11am	
Wed	9am~10am	

	Section C	
Day	**Time**	**Room#**
Sat	10am~11am	109
Sun	9am~10am	
Wed	11am~12pm	

Start Up

Course Materials:

Visit regularly for course materials https://cse.buet.ac.bd/moodle/course/view.php?id=108

Prescribed Textbook for C++:

- Herbert Schildt, Teach Yourself C++, McGraw Hill, 3rd Edition.
- Robert Lafore and Waite Group, Object Oriented Programming in C++, Sams Publishing, 4th Edition.
- Herbert Schildt, The Complete Reference C++, McGraw Hill, 4th Edition.

Prescribed Textbook for Java:

- Herbert Schildt, Java The Complete Reference, McGraw Hill, 12th Edition.
- Paul Deitel and Harvey Deitel, Java How to Program, Prentice Hall, 11th Edition.

Learning Schedule for Part A

Week	Lecture#	Topic to Learn	Programming Language
Week 1	1 ~ 3	Basic Features of OOP	Both **C++** & **Java**
Week 2	4 ~ 6	Encapsulation – Data Hiding	
Week 3	7 ~ 9	Polymorphism	
Week 4	10 ~ 12	Inheritance	
Week 5	13 ~ 15	Exception Handling	
Week 6	16 ~ 18	Input - Output	
Week 7	19 ~ 21	Generic Class – STL & Collections	

Tight Schedule!

Vacation means Extra-Class !!

Marks Distribution

Distribution of Attendance Marks:

Range of Attendance	Percentage	Marks
90% or Above	10%	30
85% to <90%	9%	27
80% to <85%	8%	24
75% to <80%	7%	21
70% to <75%	6%	18
65% to <70%	5%	15
60% to <65%	4%	12

Distribution of Overall Marks:

Scope	Marks	Percentage
Attendance	30	10%
Class Test	60	20%
Final	210	70%
	Total	100%

Be sincere about attendance!!

Don’t miss classes intentionally assuming that you will continue the remaining classes or your application will be granted.

Plagiarism

Plagiarism means using someone else's words or ideas without properly crediting the original author. International rules against plagiasms:

Level of Plagiarism	Examples	Legal Actions
Mild	✓ Source cited in text but left out of reference list. ✓ Quotation marks omitted around a quote.	Grade penalty or automatic zero.
Moderate	✓ Text copied from a source with minor changes. ✓ Source text or ideas rephrased without citation.	Failing grade on course
Severe	✓ Patchwork of different texts or ideas submitted as original. ✓ Paper or documents written by someone else.	Academic probation or expulsion

Mode of Learning OOP

Learn

Unlearn

Relearn

OOP Programming Tools

Installation of VS Code:

- **Visual Studio (VS) Code is free.** Visit https://code.visualstudio.com/download to download VS code.
- **Add extensions using extension button** (three connected and one isolated rectangle). Write "C/C++" on search button and add extensions like C/C++ Compile Run, C/C++ intellisence, C/C++ Runner, C/C++ Extension Pack, etc.
- Don't forget to install **Copilot**. Open and use **GitHub** account.

Installation of Intellij:

- **Download and install latest LTS version of JDK, say JDK 21 (although the latest version is 24, but non-LTS).** Visit https://www.oracle.com/java/technologies/downloads/#jdk21-windows
- **Download and install Intellij IDEA Community Edition** (This is the only free version). Visit https://www.jetbrains.com/idea/download/?section=windows

Note: All C/C++ programs in the lecture notes are written using VS Code and Java Programs are written using Intellij IDEA Community Version.

Work hard ! Be smart !!

Work Hard

- **Don't miss classes.** Huge syllabus. Don't assume that that you can learn later. More than 3k$^+$ pages to read.
- **Write each program of lecture notes at least once by your own.** You will feel easy, but face difficulty when try to do.

Be Smart

- **Understand the difference between smartness and cheating.**
- **Use smart tools for learning programming**. You can use VS Code for C++/Java and Intellij for Java. Use of Intellisense and copilot in VS code raises your interest in coding.
- **Get help from ChatGPT, copilot, Claude, etc.**

  Roo Code – May mind to solve easy problem