



Department of Information Technology

Academic Year 2024 – 2025 (Odd Semester)

Degree, Semester & Branch : III Semester-B. Tech Information Technology

Course Code & Title : CS3391 Object Oriented Programming

Name of the Faculty member (s) : S. Sakkaravarthi, AP/IT

Innovative Practice Description

- **Unit / Topic** : Unit 3 / Exception Handling Basics
- **Course Outcome** : CO3
- **Topic Learning Outcome:** TLO9
- **Activity Chosen** : Think Pair Share
- **Justification:**
 - Exception handling involves identifying errors, debugging programs, and writing reliable code. A clear understanding of exception types, try-catch blocks, finally clauses, and custom exceptions is essential for developing robust and error-free Java programs.
 - Think Pair Share activity is chosen to help students understand and apply the concept of exception Handling in java.
- **Time Allotted for the Activity:** 20 Minutes
- **Details of the Implementation:**
 - The instructor began by introducing the concept of exception handling, discussing the types of exceptions (checked and unchecked), and explaining various exception handling mechanisms with examples.
 - Students were given questions related to exception handling and asked to think individually on how to use the concepts in real-time scenarios as shown in Figure 1.
 - Students paired with a peer to discuss their responses, compare their understanding, and justify their approach, which help them internalize the logic behind exception handling as shown in Figure 2.
 - A few student pairs were randomly selected to present their findings and share how exception handling can be used in real-world applications as shown in Figure 3.
- **CO – PO / PSO mapping:**

CO	PO1	PO2	PO3	PO9	PO10	PSO3
CO3	2	3	2	2	2	3

(1 – Low 2 – Moderate 3 – High)

- PO / PSO mapped:

Innovative practice	PO1	PO2	PO3	PO9	PO10	PSO3
CO3	2	3	2	2	2	3
Justification for correlation	Students will be able to comprehend and apply the principles of exception handling	Students will be able to identify and handle exceptions, demonstrating analytical thinking in solving programming issues.	Students will be able to develop and apply effective error-handling strategies	Students will be able to improve peer-to-peer learning and teamwork.	Students communication skill and confidence level will be improved as they are facing audience	Students will be able to apply exception handling techniques in software application scenarios.

- Images / Screenshot of the practice:



Fig 1: Students thinking about the given program Fig 2: Pair with neighbour and discuss answer



Fig 3: S. Dinesh Kumar & C.A Parasuram share the answer to entire class

- **Reflective Critique:**

- ❖ *Feedback of practice from students and other stakeholders:*

- Students acknowledged that sharing exception handling solutions with class mates enhanced their ability to debug and refine their code.
- Students gained a clearer understanding of exception categories and how to manage them effectively through the activity.

- ❖ *Benefit of the practice:*

- The activity helped students better understand various exception types and the correct ways to handle them.
- Through this activity, students gained ability to write robust java programs by applying exception handling techniques.
- This activity promoted active listening and speaking skills.

- ❖ *Challenges faced in implementation:*

- Due to time constraints, only a few student pairs could present their solutions.
- Some students forget to include a catch block after try or use it improperly, which affects error handling flow.

To address this, the instructor clearly explained the correct structure and usage of try-catch blocks with appropriate examples.

References:

- https://www.ritrjpm.ac.in/images/computer-science/2021-2022/3.VA_OCS752-ThinkPairShare.pdf
- <https://www.ritrjpm.ac.in/images/computer-science/2022-2023/TPS-RV-I-IT-PSPP.pdf>

Signature of Faculty Member

HOD