Multi-Paradigm Programming - Introduction

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What We Will Cover

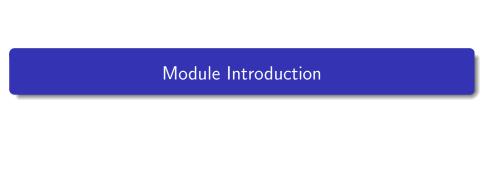
Goals of this Session

- 2 Module Introduction
 - Module Descriptor
 - Learning Outcomes
 - Indicative Content
 - Assessment



Goals

- To understand....
 - What the module is about
 - The learning outcomes of the module
 - What the content will be like
 - How you will be assessed



Module Descriptor

The aim of this module is to provide an introduction to various programming paradigms, such as object-oriented programming, functional programming and dataflow programming.

Learning Outcomes

- LO1 Compare different programming paradigms.
- LO2 Select an appropriate programming paradigm for a given programming problem.
- LO3 Write programs using a variety of different programming paradigms.
- LO4 Explain how various programming paradigms have evolved over time.

Indicative Content

- Object-oriented programming
 - Encapsulation
 - Data and methods Objects, classes, instances
- Dataflow programming
 - Tables, spreadsheets, tensors Dataflow graphs
 - Sessions
- Functional programming
 - · Lists, pairs
 - Map, reduce
 - Recursion

Assessment

- Programming based (40%)
- Programming based (40%)
- Report based (20%)

