Multi-Paradigm Programming - Introduction

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What We Will Cover

1. Goals of this Session

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

Goals of this Session

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 Introduction

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%)

The End