



GALWAY MAYO INSTITUTE OF TECHNOLOGY, DUBLIN
RD CAMPUS

ADVANCED OBJECT-ORIENTED DESIGN PRINCIPLES AND
PATTERNS ASSESSMENT II

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Chapter 1

Assignment

From accessing the UML it seems the iterator pattern is suitable pattern due to the nature of " A Client class should be able to iterate over all instances of Beta, Epsilon, Zeta" delivered in the project specs. I created a Client class alongside an Omega interface to access the Delta class and decouple the array lists to each class. By implementing the iterator package we can iterate over the objects instead of creating a specific iterator class

When Re-factoring the programme one massive principle that stands out is the Single Responsibility Principle. From assessing the UML diagram there is too much dependence on the class 'Delta'. The design is tightly coupled to this class and must be decoupled to allow for basic abstraction and encapsulation of each class (alpha , delta) .

By abstracting the model and implementing an interface on class " Omega" (Derived by the names provided in spec) we can decouple this program and replace the Dependency Inversion Principle.