

AP Laboratory 3

Dr Simon Rogers

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Introduction and aims

Further work on inheritance and creating an object with generics.

Tasks

The goal here is to see how to use make an object with generics.

- Create your own Dictionary class that maintains two **ArrayList** objects of generic types, to hold objects and their definitions (e.g. people and their contact details). The class should have an **add** method to add an object/definition pair and a **get** method to return the definition objects for any particular input object (see example provided in class). This provides similar operation to Java's **HashMap** object.
- Create a main method that shows two of these objects being created one where both object types are **Strings**, and one where one is **String** and one an **Integer**.
- You should now use this as the basis of an address book in which **people** objects (including a name) are the keys and contact detail objects are the values. Contact details can be of different types but they should all be storable in a single dictionary. As the generic definition means that all objects have to be of a single type, you'll need to create a class hierarchy (or interface) to achieve this.