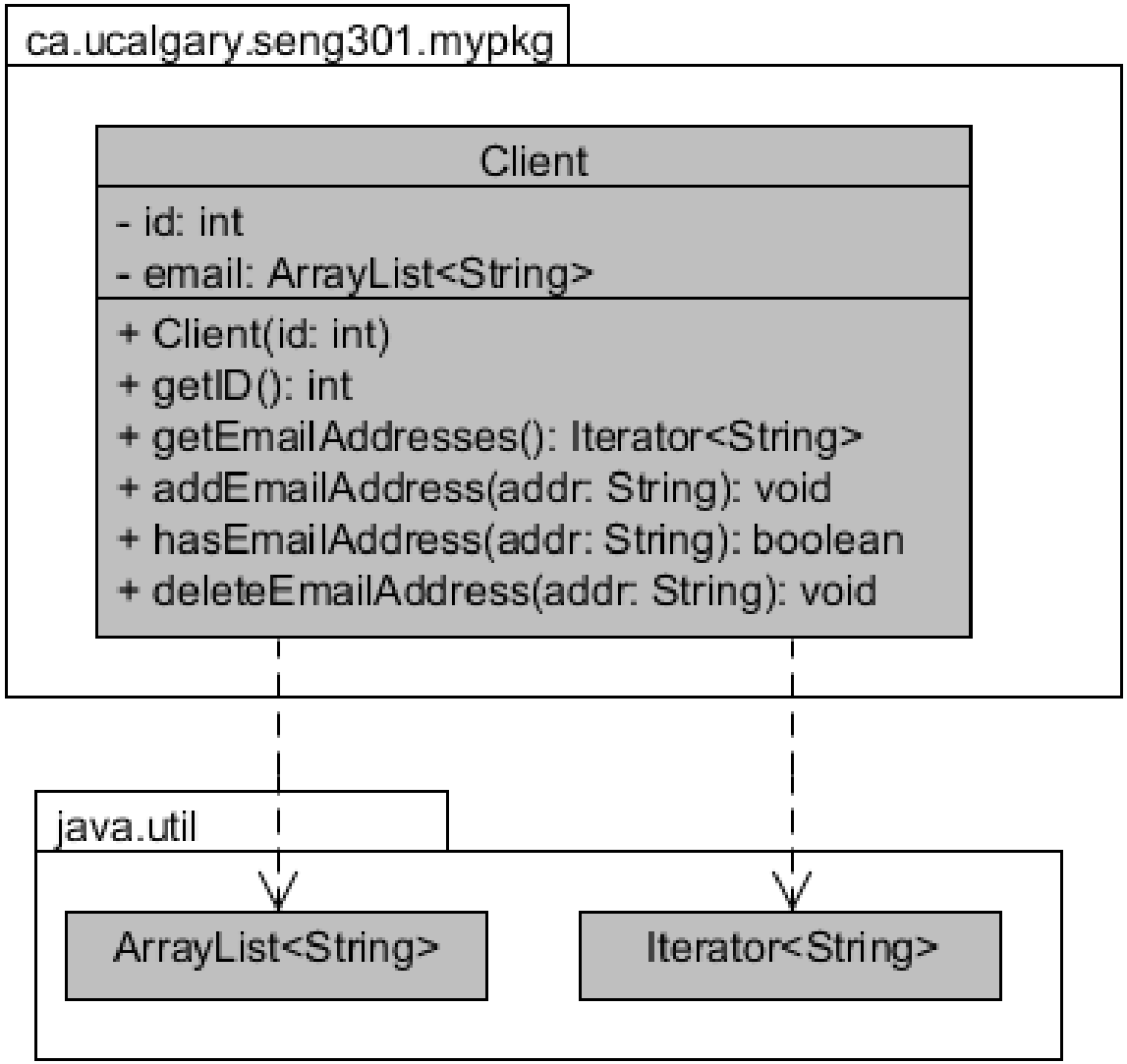
Software Engineering 301:
Software Analysis and Design

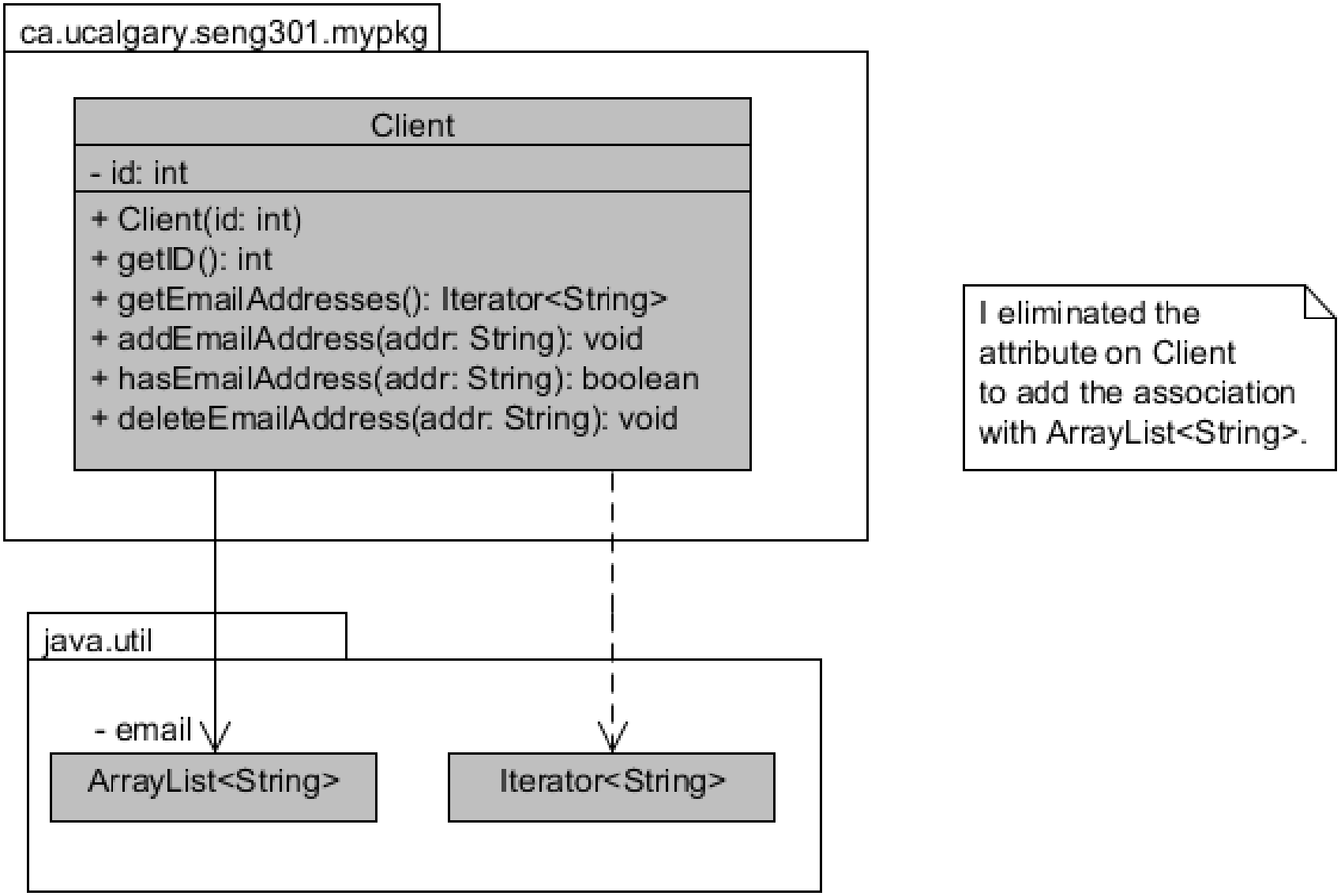
Structural modelling example

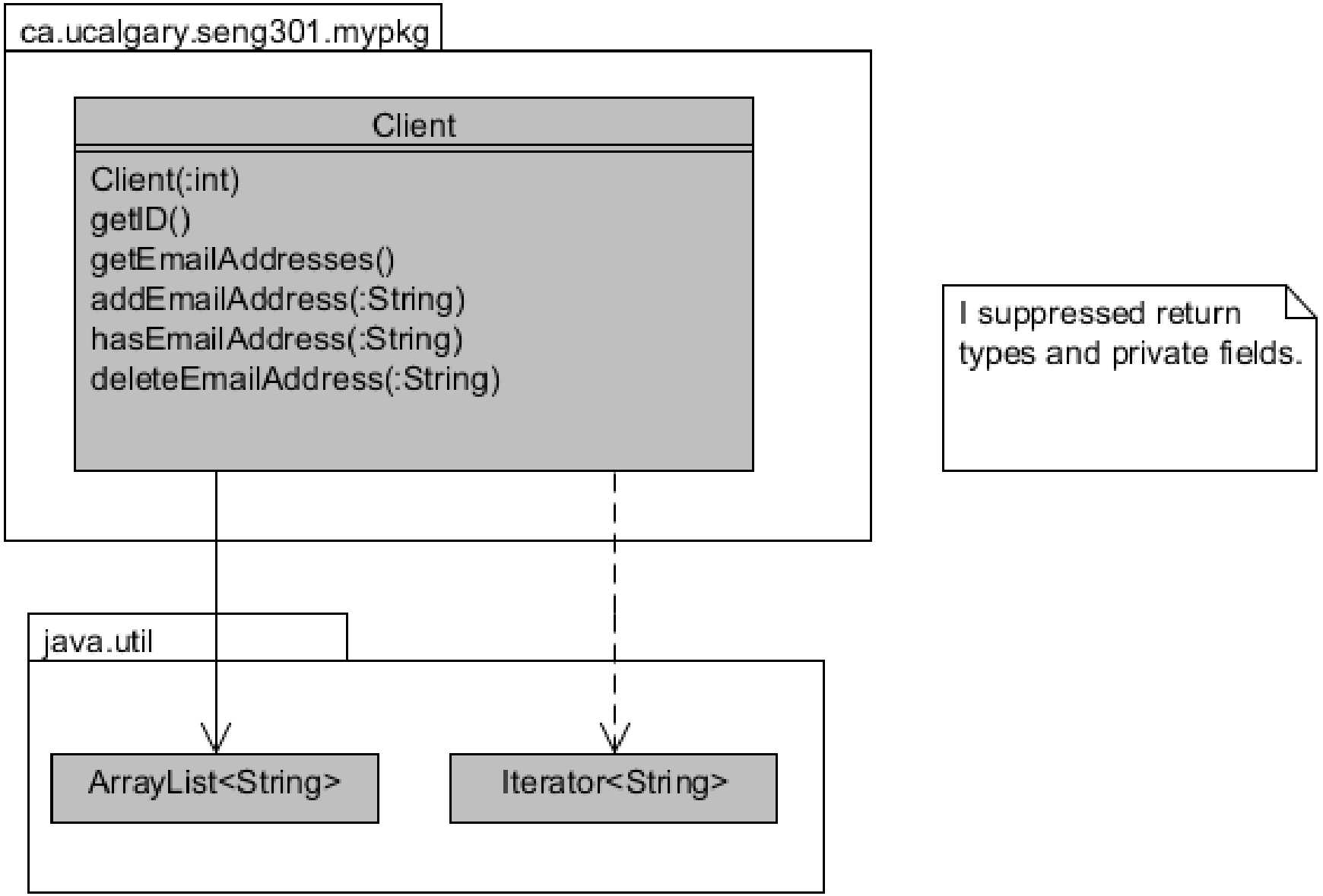
```
package ca.ucalgary.seng301.mypkg;

import java.util.ArrayList;
import java.util.Iterator;

public class Client {
   private ArrayList<String> email =
      new ArrayList<String>();
   private int id;

   public Client(int id) {
     this.id = id;
   }

   public int getID() {
      return id;
   }

   public Iterator<String> getEmailAddresses() {
      return email.iterator();
   }

   public void addEmailAddress(String addr) {
      if(!hasEmailAddress(addr))
         email.add(addr);
   }

   public boolean hasEmailAddress(String addr) {
      return email.contains(addr);
   }

   public void deleteEmailAddress(String addr) {
      email.remove(addr);
   }
}
```

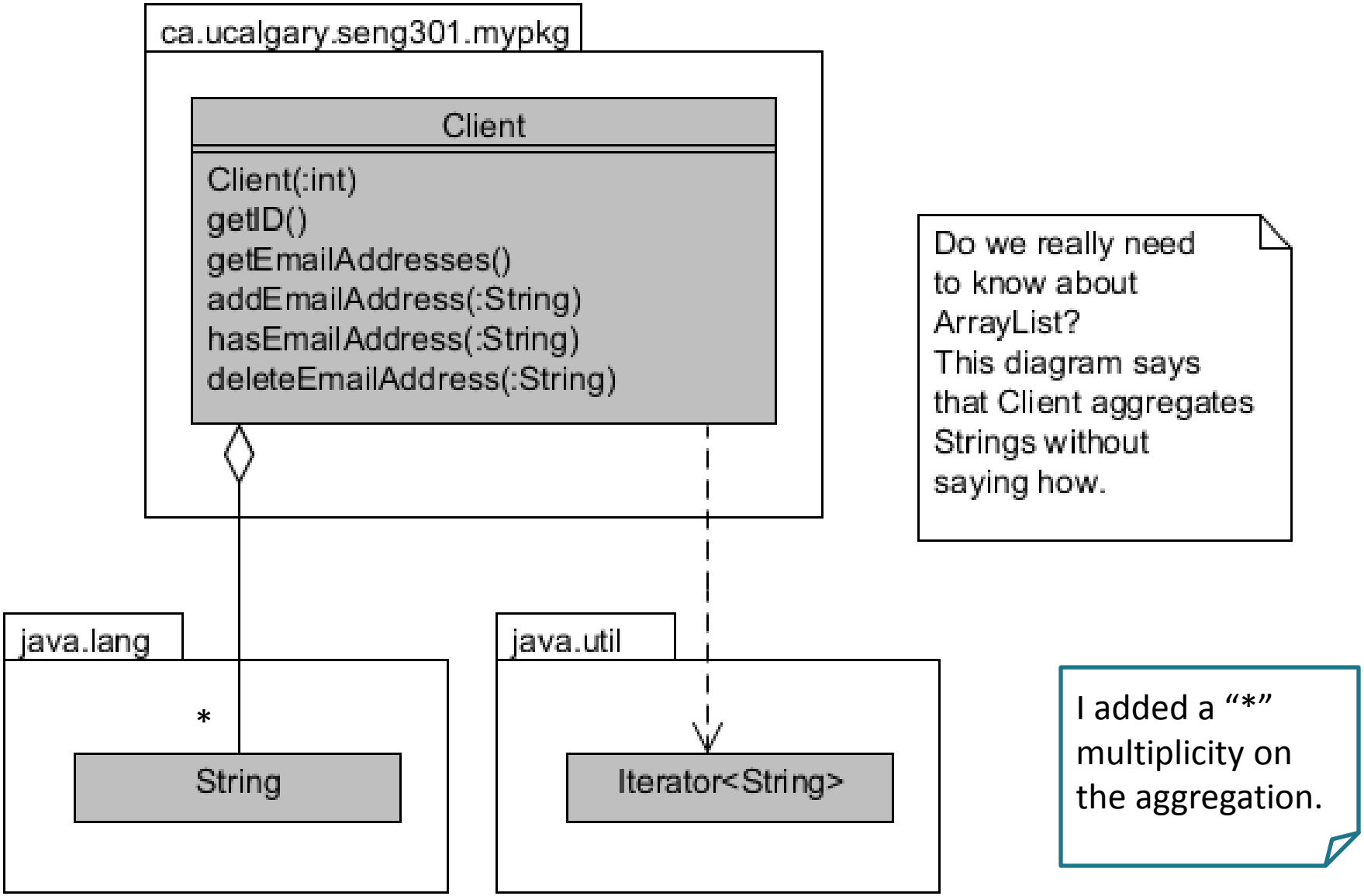


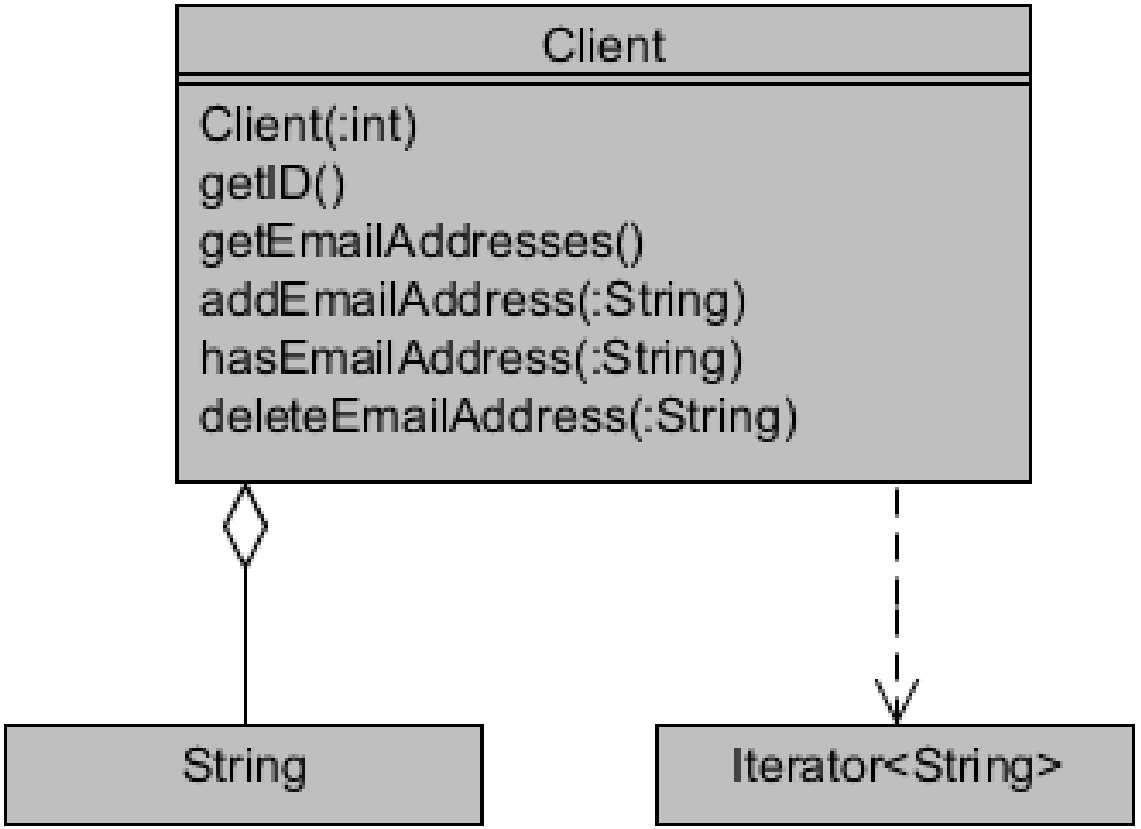
I coloured the classes grey to make them stand out better.

I chose to show all the fields and operations of Client.









The packages don't tell us a lot here. So there isn't much point in showing them.

I suppressed the multiplicity on the aggregation.