

## Android Internship Assessment

Submitted By –

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**Ques 2)** one of the developer is facing the following error while using the application,

Exception in thread "main" java.util.ConcurrentModificationException

at java.util.ArrayList\$Itr.checkForComodification(ArrayList.java:859)

at java.util.ArrayList\$Itr.next(ArrayList.java:831)

at main.java.Bobble.main(Test.java:25)

Can you tell what he might be doing wrong? and how he can fix it? demonstrate how to reproduce the error, and then the resolution.

**Ans)** This error occurs as such a concurrent modification has been made in ArrayList that it has resulted in structural failure of the ArrayList.

With the following example, we can reproduce this error.

```
import java.util.ArrayList;
import java.util.Iterator;
import java.util.ListIterator;

public class MyList {
    public static void main(String[] args) {
        ArrayList<String> al = new ArrayList<String>();

        al.add("S1");
        al.add("S2");
        al.add("S3");
        al.add("S4");

        Iterator<String> lir = al.iterator();

        while (lir.hasNext()) {
            System.out.println(lir.next());
        }

        al.add(2, "inserted");

        while (lir.hasNext()) {
            System.out.println(lir.next());
        }
    }
}
```

In the above code, the iterators are said to be fail-fast as modifications to the very structure of the ArrayList have been made after iterator is created without the usage of any methods of the

iterator. To resolve this error, a new object of the iterator should be made so that the ArrayList can be accessed error-free.