1. **Session 8: Collection classes in Java**
2. **Intended Learning Outcome:**
   1. Be familiar with the Java collections framework.
   2. Understand the idea of Java Generics
   3. Be able to implement sophisticated applications using different Java collections
3. **Expected skills:  
   -** Knows what a framework is and what is Collection framework.  
   - Knows about generics and can explain generics in simple terms.  
   - Can use different elements from collection framework such as:  
   - Can work with Vector.  
   - Can explain basic differences between Vector and ArrayList.  
   - Can work with Hash Map  
   - Can use iterators and comparator.
4. **Tools Required:**

a. JDK   
b. ECLIPSE / NETBEANS

1. **Session Detail:**1. Brief Lecture on Collection framework. (10 minutes)  
   2. Lecture on Generics and showing some examples. (10 minutes)  
   3. Review on ArrayList and explaining how it is a Collection class by showing collection class hierarchy. (10 minutes)  
   4. Use of Vector. (20 minutes)  
   5. Use of Hash Map. (20 minutes)  
   6. Use of Iterator to loop through. (10 minutes)  
   7. Use of comparator to sort elements. (10 minutes)

8. Project Mentors Session

1. **Post Lab Exercise:**
2. **Further Readings:**
   1. http://www.javatpoint.com/collections-in-java