1. Session 7: Exception handling in Java

2. Intended Learning Outcome:

   a. Will learn about what is exception and the need of handling them.
   b. Will learn how to handle exceptions in Java.
   c. Will know how to develop programs by handling exceptions.

3. Expected skills:

- Can explain what exceptions are.

- Can write code to handle exceptions.

- Knows about different types of exceptions.

- Know the use of keywords – try, catch, finally, throw, throws.

4. Tools Required:

   a. JDK
   b. ECLIPSE / NETBEANS

5. Session Detail:

1. Teacher will give lecture on what is exception, what is exception handling, why exception handling is important, how to handle exceptions in java (30 minutes)

2. Teacher will write try-catch block and explain how exceptions are being used. (20 minutes)

3. Teacher will explain - NullPointerException, ArithmaticException, NumberFormatException, ArrayIndexOutOfBoundsException. (20 minutes)

4. Teacher will show the use of finally, throw and throws keyword in exception handling (20 minutes)

5. Project Mentors Session. (60 minutes)

6. Post Lab Exercise:

   a. Do these exercises:

      - https://docs.oracle.com/javase/tutorial/essential/exceptions/QandE/questions.html

7. Further Readings:

   a. http://docs.oracle.com/javase/tutorial/essential/exceptions/definition.html
   b. http://beginnersbook.com/2013/04/java-exception-handling /
   c. https://www.javacodegeeks.com/2013/07/java-exception-handling-tutorial-with-examples-and-best-practices.html