# **ASE-2017**

## Workshop

#### on

## **Advancements in Software Engineering**

August 13-19, 2017

#### A Brief Report of the Workshop

A workshop of one weeks duration on Advancements in Software Engineering has been organized at Jaypee University of Engineering & Technology during August 13-19, 2017, by the Department of Computer Science & Engineering. Below mention topics have been covered-

- Recent developments in Software engineering
- Software Change trends
- Role of Web Service in Software engineering
- Risk assessment and agile methodology
- Component Definition
- Modelling of Component using visual paradigm
- Implementation of component in Java 8 with example
- Component development process
- Risks in component development process
- Risks & Process metrics for object oriented design
- Lambda Streams
- Preparation of service oriented Architecture (Examples: Runway Management)
- Concurrency
- Event Bus & Service Oriented Architecture
- Implementation of CBSE with event bus
- Project Airbus A-380, Integration and testing.

This workshop was arranged in 20 technical sessions spread over seven days with a nice blend of lectures, Demonstrations and Hands on practices. The task for Hands on practices has been devised into 60 modules Its summary is mentioned below-

- 60 Software Components
- Object-oriented Modelling in UML
- Task with complex relationships
- Implementation in Java 8
- 120 UML diagrams (60 class diagrams and 60 component diagrams) modelled.
- 60 software components implemented.
- More than 150 complex methods implemented in Java 8.
- More than 5000 lines of source code implemented in Java 8.
- More than 120 Unit-Tests implemented in Java 8.
- The project was successful and Airbus A380 works.
- Outstanding motivation and performance from the participants! cted sessions, namely:

Dr. Carsten Mueller [ ITG, Nuremberg, Germany ( <a href="http://www.itg-research.net/">http://www.itg-research.net/</a>)] – Main Resource person

Prof. Shishir Kumar (JUET, Guna)

Mr. Amit Srivastava (JUET, Guna)

A total of 54 participants have participated in this workshop with full enthusiasm. Outcome of the workshop was well appreciated by the participants and workshop was completed with a positive note that such events should be organized frequently.

### **HOD (CSE)**

JUET Guna