IE306
ASSIGNMENT 2
Due-Date and Time : March 28, 2024, 15:00 P.M.

DISCUSSION TOPIC: Past and Future of Simulation Software

Dr. C. Dennis Pegden is a key contributor into the field of software development for the discrete event simulation platforms. He led the development of the **SLAM** simulation language, the **SIMAN** language, the **Cinema** animation system, the **Arena** simulation system, and the **Simio** Simulation Software System.

Watch the video interview of Dr. C. Dennis Pegden available on Computer Simulation Archive and answer the related questions Dr. Pegden responded during the interview and also disscuss the evolution of simulation software.

Report Length: 50-100 words for each of the first six questions. Your answer to the seventh question should preferably be less than 300 words.

1. Summarize Dr. Pegden's comments on the development of **SLAM** (**S**imulation **L**anguage for **A**lternative **M**odeling). When, How, and Why was it developed?

2. What was unique about **SIMAN software** when it was developed?

3. Which simulation software does Dr. Pegden think as a **great achievement in computer science**?

4. What project management techniques are they using in software development process at Simio LLC?

5. What are Dr. Pegden's views on simulation technologies especially related to **cloud based applications and animation**.

6. What advice does Dr. Pegden give to new students in the simulation field?

7. Review the simulation software survey by James J. Swain (2017) and discuss with your teammates the future trends of simulation platforms. **Summarize your views.**

References:
Oral History Interview with Dr. C. Dennis Pegden, Computer Simulation Archive, Chronicling Computer Simulation Pioneers, NC State University Libraries, (**Video Length: 72 minutes),**
Video Link: https://d.lib.ncsu.edu/computer-simulation/videos/c-dennis-pegden-interviewed-by-robert-g-sargent-pegden/

James J. Swain, *Software Survey: Simulation*, OR/MS Today, October 2017, pp.38-49.