E-learning system is gaining more and more importance in the new millennium for imparting education and training. In this work, a novel E-portfolio architecture is being proposed and a model was developed which provides adaptive and interactive content for teaching programming languages where we can trace the sequence of execution of the program and the arrangement of data in the memory, which gives a clear visualization of the program. The model developed can be used for training learners on programming. This can be implemented in classroom teaching and also can be made online. Online chat is also provided for discussions and facility to post the doubts and clarify them immediately without disturbing the class.

Considering the fact that not just delivering content would be sufficient, and more features would be expected from the modern learners, the e-portfolio system is embedded with adaptability and made interactive. The E-portfolio designed will be flexible for the learner by implementing the need based learning styles of the learner. The flash animations and three-dimensional images along with audio and video can be used to make the content live. The
learners are analyzed by offering them different questions and judge their learning styles and based on this outcome they are given variants of learning content. This paper describes the architecture of an interactive and adaptive E-portfolio for enhancing the learning process.

Reference

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Index Terms

Computer Science
Web Applications

Key words

E-portfolio

E-learning

Adaptive learning
Multimedia learning
Learning styles
Web based learning
Real-time Assistance