SEI Training

Architecture Tradeoff Analysis Method Evaluator Certificate

The ATAM

The SEI Architecture Tradeoff Analysis Method® (ATAM®) is a proven, highly effective method for systematically evaluating software architectures for fitness of purpose. The ATAM exposes architectural risks that potentially inhibit the achievement of quality attribute goals and the system's business and mission goals. Government and industry organizations have used the ATAM for over 10 years to improve communication, expose architectural risks, clarify requirements, and produce better systems.

Most complex software systems must be modifiable and perform well. They might also need to be secure, interoperable, portable, and reliable. But…

- what precisely do quality attributes such as modifiability, security, performance, and reliability mean?
- can a system be analyzed to determine whether it has certain desired qualities?
- how soon can such analysis occur?
- how do you know if software architecture for a system is suitable without having to build the system first?

ATAM Evaluator Certificate

The ATAM Evaluator Certificate prepares a qualified software professional to perform effective ATAM architecture evaluations as part of a team.

A software professional earns the SEI ATAM Evaluator Certificate by completing these courses:

Software Architecture: Principles and Practices
Classroom or eLearning

ATAM Evaluator Training
Classroom only

Candidates must also pass an objective assessment of their knowledge of Software Architecture: Principles and Practices.

There is no fee for the certificate. There are fees associated with the requisite courses and the examination. Additionally, there is no expiration for the certificate.

Software Architecture: Principles and Practices Course

This course provides insight into ways to use software architecture successfully in your software-reliant system development. Case studies illuminate the key technical and business issues regarding software architectures. In particular, the course covers

- what software architecture is and the value it provides
- the importance of quality attributes
- how to use, evaluate, and document software architectures
- the role of a software architect in his or her organization

This course is based on the book *Software Architecture in Practice, 3rd Edition*, and is available as a two-day classroom course or as an eLearning course.

Software Architecture: Principles and Practices Examination

The required Software Architecture: Principles and Practices Exam provides an objective validation of the candidate's knowledge and understanding of software architecture. Candidates for the ATAM Evaluator Certificate must achieve a passing score of 75% in order to qualify for the certificate.

ATAM Evaluator Course

The two-day ATAM Evaluator course prepares software architects to conduct a software architecture evaluation using the ATAM. Through lectures and highly interactive exercises, participants learn the ATAM and how to apply it to evaluate software architectures. A significant portion of the course is dedicated to participants' performing an ATAM evaluation exercise with guidance from instructors. Course topics include

- quality attributes and their roles in software architectures
- quality attribute tradeoffs
- why architecture analysis is important
- how to execute an ATAM evaluation, in particular
  - the steps of the ATAM
  - the roles and responsibilities of the various participants
  - the artifacts created during the evaluation

This course is based on the book *Software Architecture in Practice, 3rd Edition*, and is available as a two-day classroom course or as an eLearning course.

Related Web Sites
sei.cmu.edu/certificates
sei.cmu.edu/architecture

For Course Registration
sei.cmu.edu/products/courses

Training courses provided by the SEI are not academic courses for academic credit toward a degree. Any certificates provided are evidence of the completion of the courses and are not official academic credentials.

About Us

For four decades, the Software Engineering Institute (SEI) has been helping government and industry organizations to acquire, develop, operate, and sustain software systems that are innovative, affordable, enduring, and trustworthy.

Contact Us

Software Engineering Institute
4500 Fifth Avenue, Pittsburgh, PA 15213-2612

Phone: 412.268.5800 | 888.201.4479
Web: www.sei.cmu.edu | www.cert.org
Email: info@sei.cmu.edu