Integrating AWS Cloud Practitioner Certification into a Systems Administration Course

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Abstract

Cloud computing has grown to become an integral part of information technology (IT) infrastructure. Organizations are increasingly utilizing cloud services to deliver a variety of applications and services in conjunction with their on-premise data center environments. As such, students pursuing careers in information systems and computing need to add cloud concepts and skills to their "tool belts" to meet the demands of employers. Amazon Web Services (AWS) has the largest market share of cloud providers. This paper reports on a systems administration course at a private liberal arts institution that was re-tooled to integrate cloud computing fundamentals using AWS as a platform for hands-on labs. Cloud computing concepts paralleled content for the AWS Cloud Practitioner Certification Exam, which students took at the end of the course. The course provided necessary skills for students in their development as information systems (IS) professionals, as well as important lessons for IS and computing educators as they consider how to incorporate cloud computing skills into their curricula.

Keywords: cloud, computing education, certification, pedagogy, amazon web service, AWS

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