



This document certifies that

Shivam Agrawal

Successfully passed the IBM Academic Certificate exam and earned the title

**Cloud Application Developer Mastery Award
(2016)**

A handwritten signature in black ink, appearing to read 'Takreem'.

Takreem El-Tohamy
General Manager
IBM Middle East and Africa

11 November 2016

UNIQUE ID 4709-1478-8442-6967

A handwritten signature in black ink, appearing to read 'N. Attia'.

Dr Naguib Attia
Chief Technology Officer
IBM Middle East and Africa