

SCENARIO

Example University is preparing for the new school year. The admissions department has received complaints that their web application for student records is slow or not available during the peak admissions period because of the high number of inquiries.

You are a cloud engineer. Your manager has asked you to create a proof of concept (POC) to host the web application in the AWS Cloud. Your manager would like you to design and implement a new hosting architecture that will improve the experience for users of the web application. You're responsible for building the infrastructure to host the student records web application in the cloud.

Your challenge is to plan, design, build, and deploy the web application to the AWS Cloud in a way that is consistent with best practices of the AWS Well-Architected Framework. During the peak admissions period, the application must support thousands of users, and be highly available, scalable, load balanced, secure, and high performing.

The following image shows an example of the student records web application. The site lists records of students who have applied for admission to the university. Users can view, add, delete, and modify student records.

The screenshot displays a web application interface for managing student records. At the top, there is a dark header bar featuring a graduation photo on the left, the text "XYZ University" in white, and navigation links "Home" and "Students list" on the right. Below the header, the main content area has a light gray background. A section titled "All students" is shown, containing a table with one row of data. The table columns are labeled "Name", "Address", "City", "State", "Email", and "Phone". The single record listed is "John Doe" with address "Example Address", city "Example City", state "example State", email "example@example.com", and phone "9009009009". To the right of the phone number is a small blue "edit" button. At the bottom of this section is a green "Add a new student" button.

Name	Address	City	State	Email	Phone
John Doe	Example Address	Example City	example State	example@example.com	9009009009