SQL Course - Final Project - RBAC System

By - Ido David - 207543612

Short explanation of the idea and plan of how we built the required RBAC.

The RBAC system allows to create ordered managing system of subjects, their roles, and the roles permissions.

The system can do that distinction by Hierarchy between the roles.

There is a "many to many" relationship between roles and subjects, roles and permissions.

Also, there is a self-reference of a role's "Child" which helped us to apply the hierarchy between roles.

Consider this Excel based planning Database that we created as our explanation:

We created The Moodle RBAC system data sample to demonstrate how our system works.

First – Let's see what roles the Moodle can allow and in which order:

There are 2 departments of roles:

Roles And Roles Hierarchy i	n the system
Academic Roles	Operational Roles
Student	Junior IT Developer
Lecturer	Senior IT Developer
Student Administration	IT Branch Manager

Student is the first academic role – which allowed to view grades.

Lecturer is allowed to create a grade and allowed to create a grade.

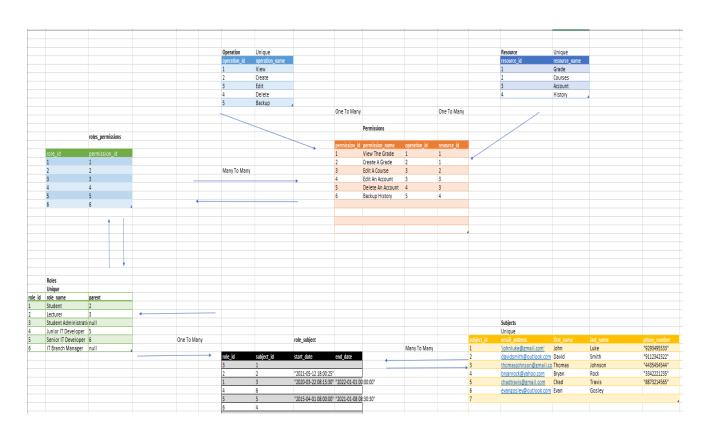
Student Administration which is the academic sector administrator allowed to create a course.

Junior IT Developer is allowed to edit an account information.

Senior IT Developer is allowed to delete an account.

IT Branch Manager is allowed to backup history.

The plan is:



Thank You,

Ido, Amit