

Hall Management System

Outline

- Entity Relationship Diagram
- ERD in depth Analysis
- Database Schema
- Trigger
- Procedure
- View
- Role

Entity Relationship Diagram

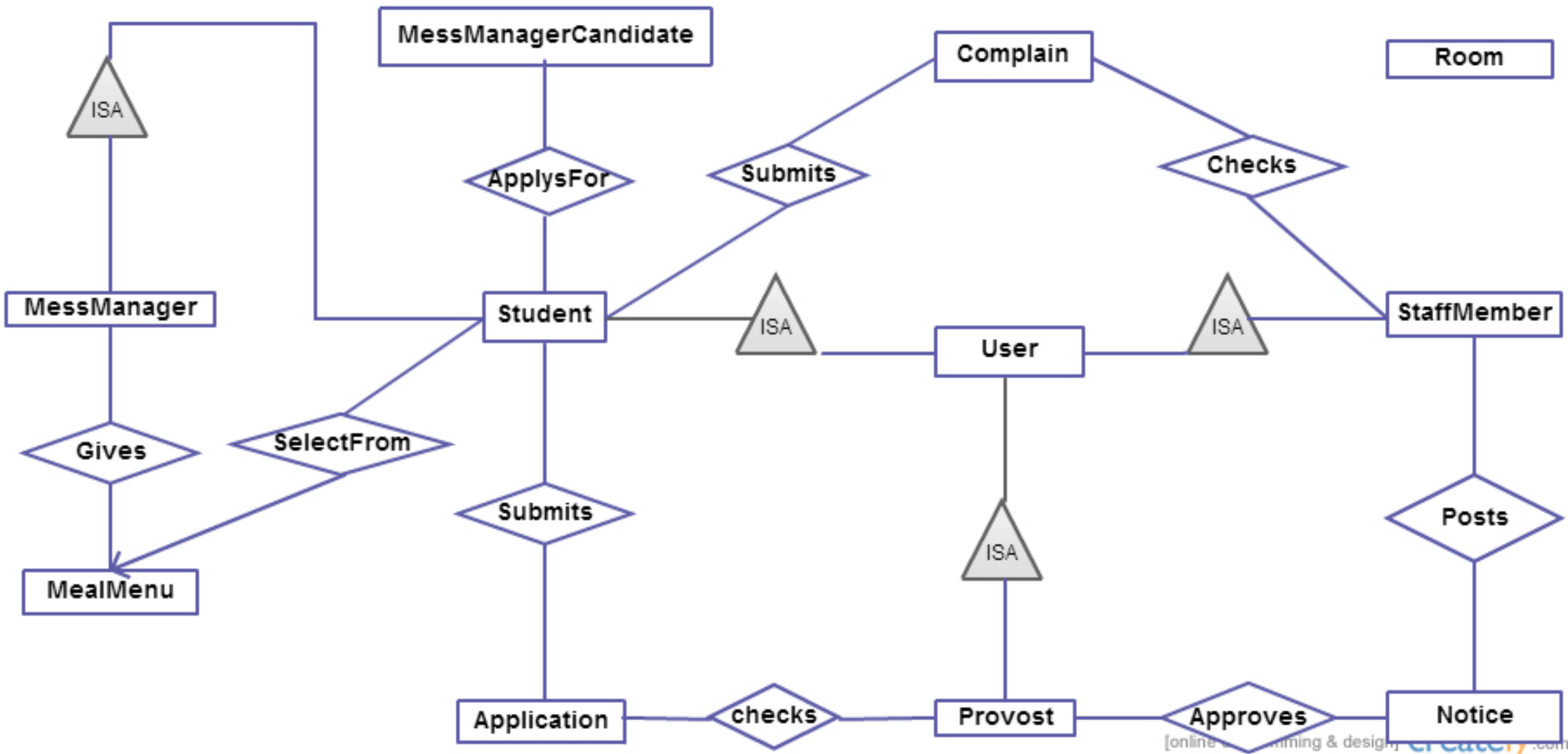


Figure : Entity Relationship Diagram

ERD in depth Analysis

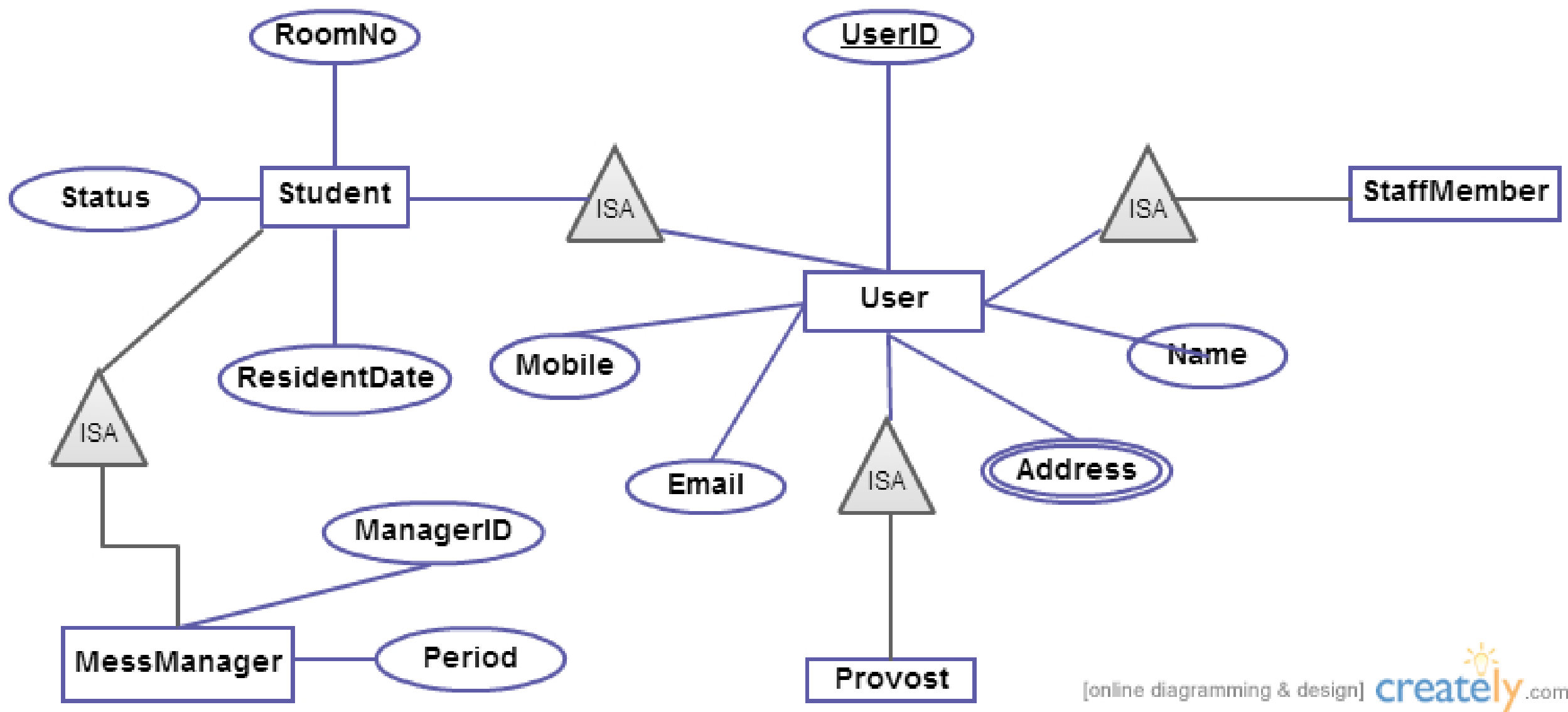


Figure : Entity Relationship Diagram

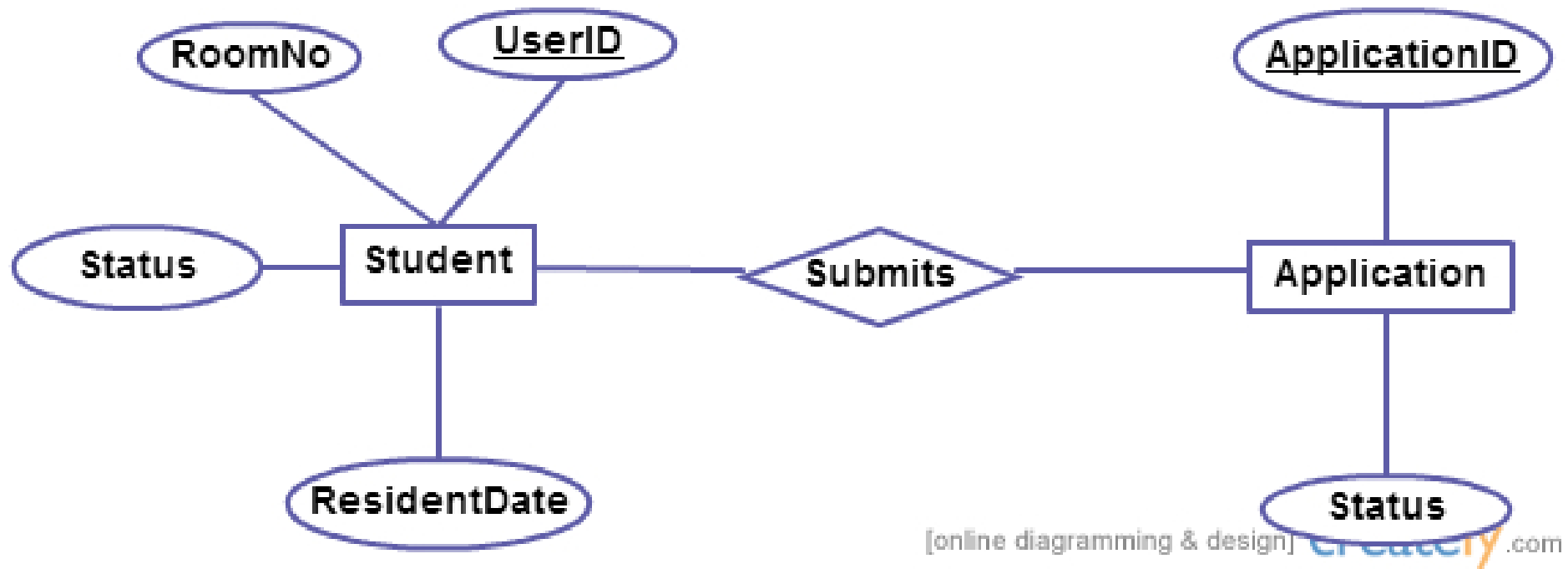


Figure : Entity Relationship Diagram

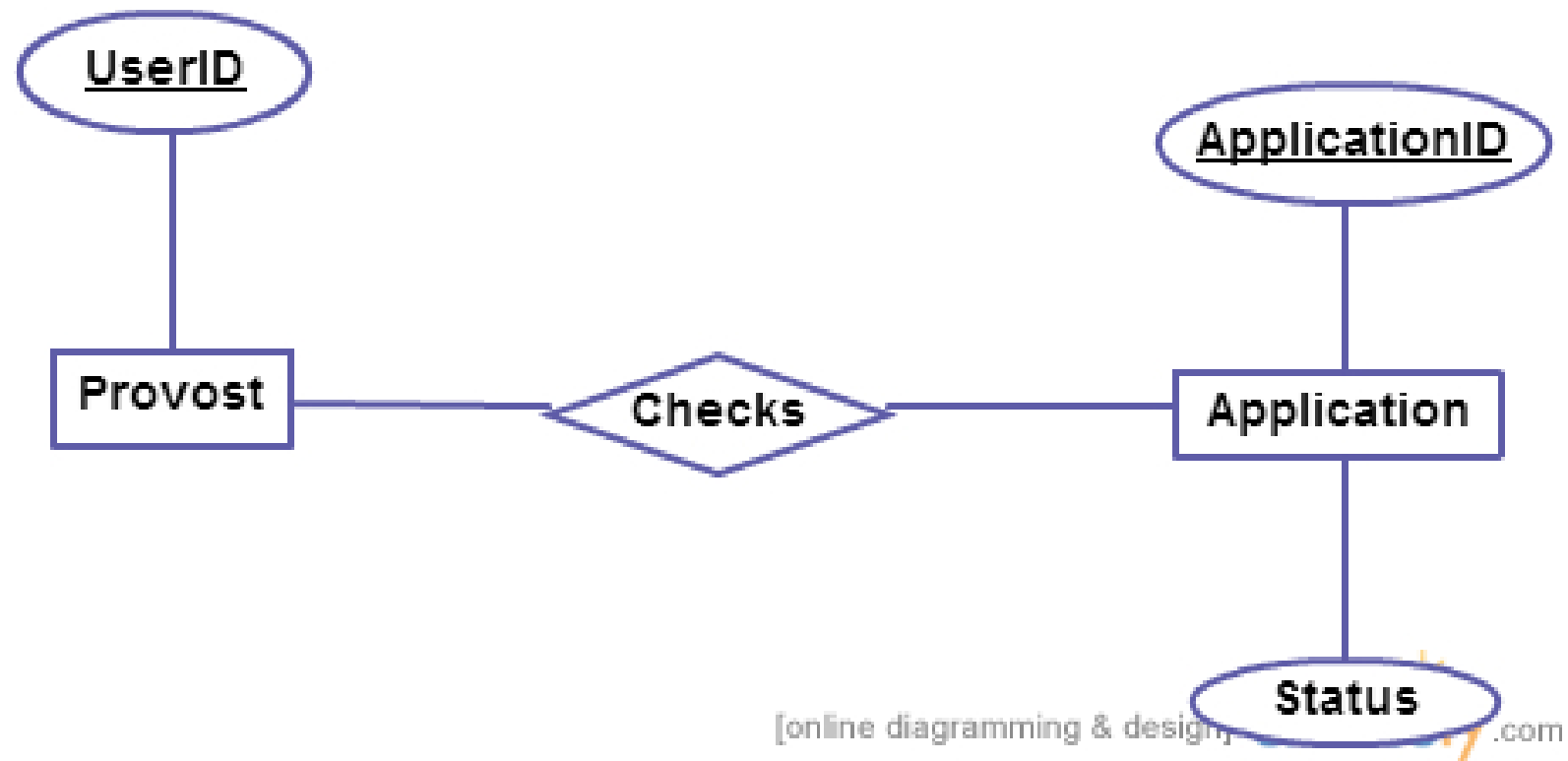


Figure : Entity Relationship Diagram

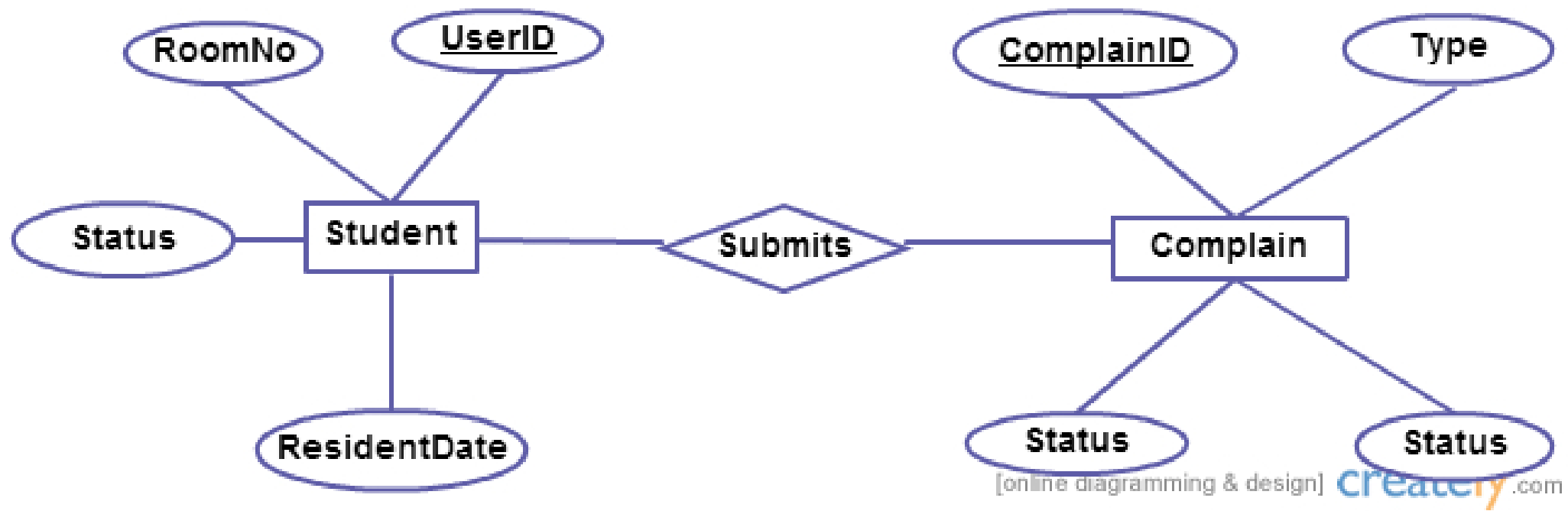


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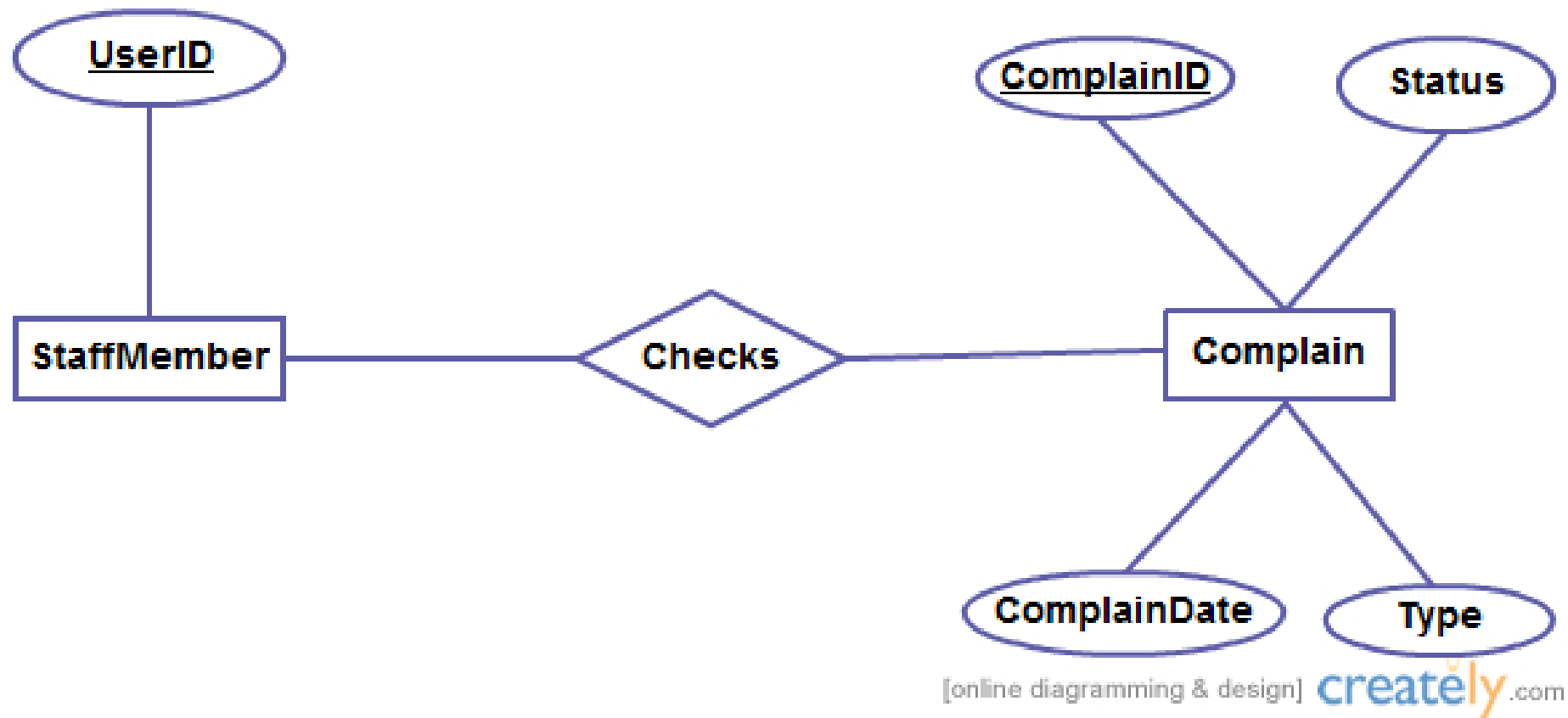


Figure : Entity Relationship Diagram

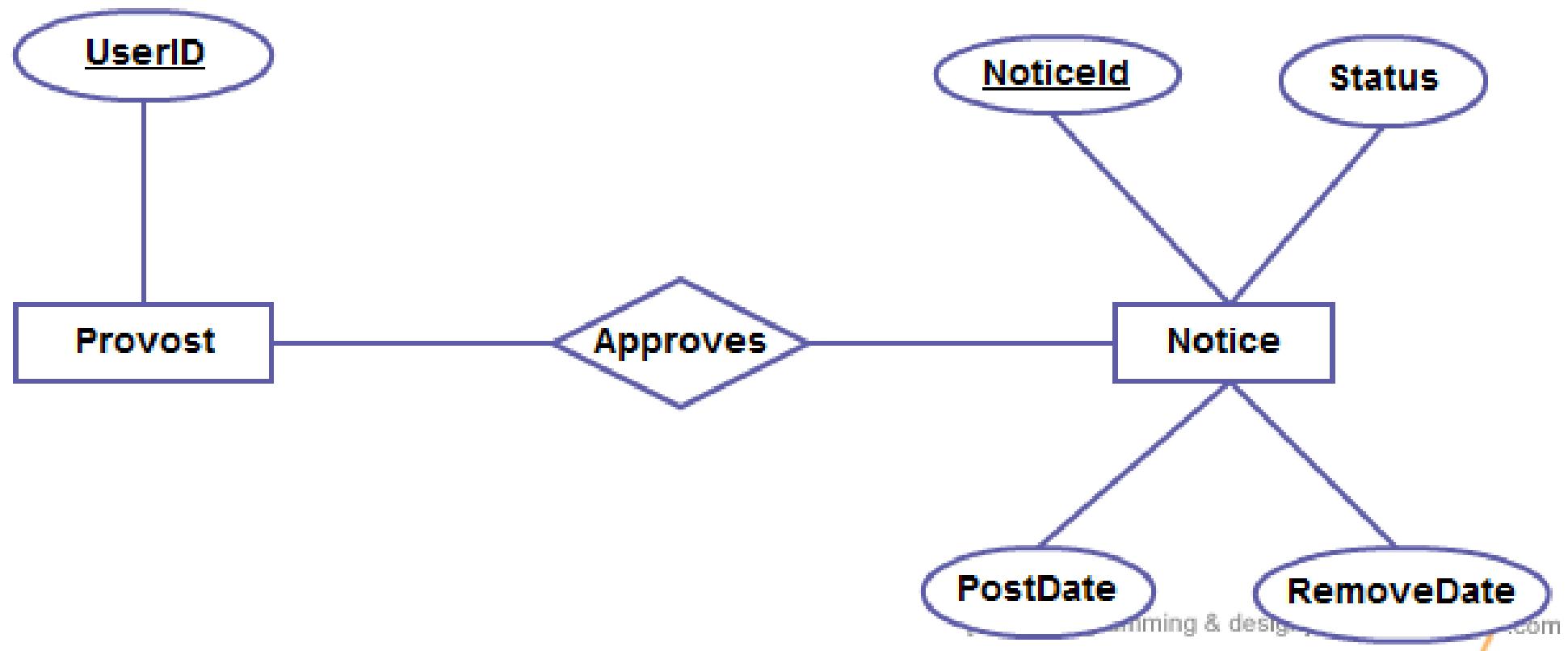


Figure : Entity Relationship Diagram

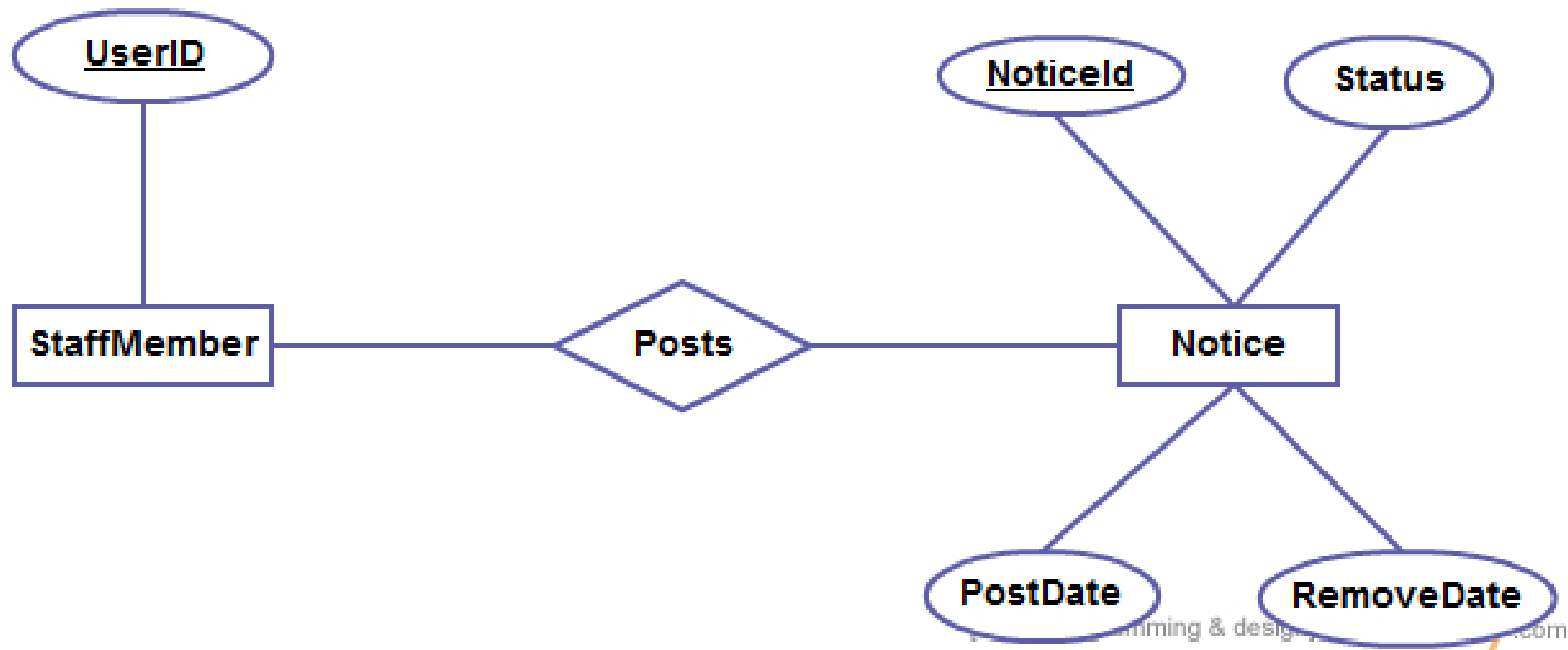


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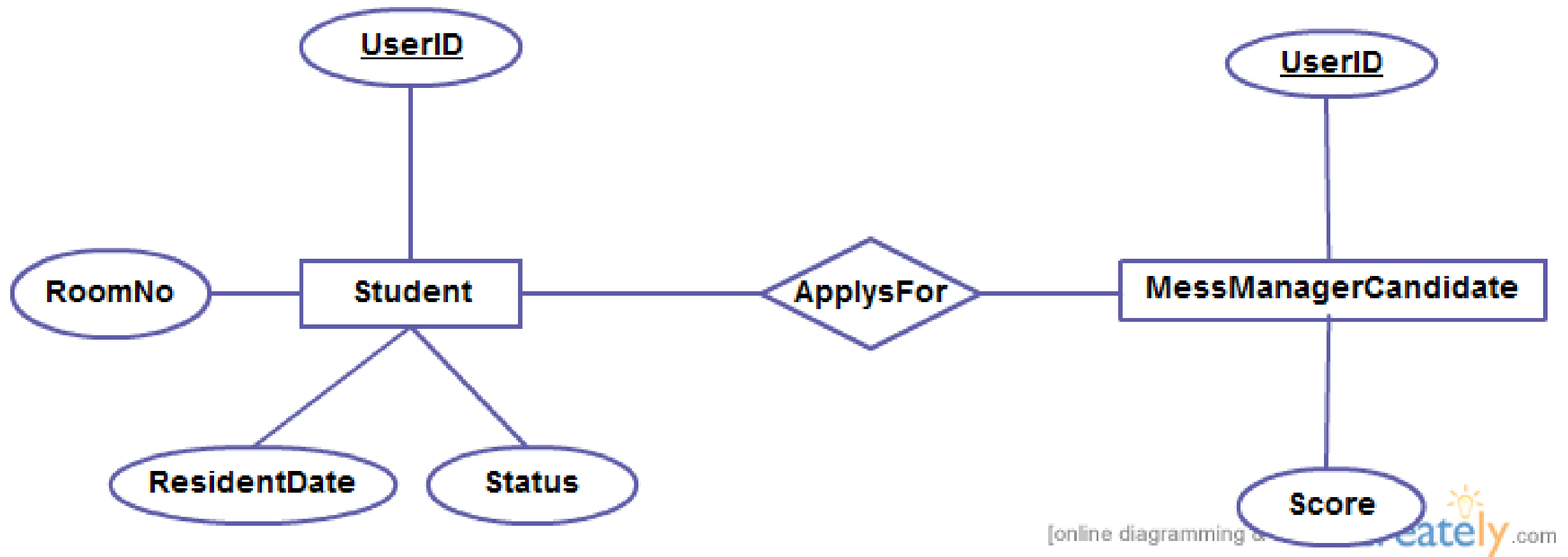


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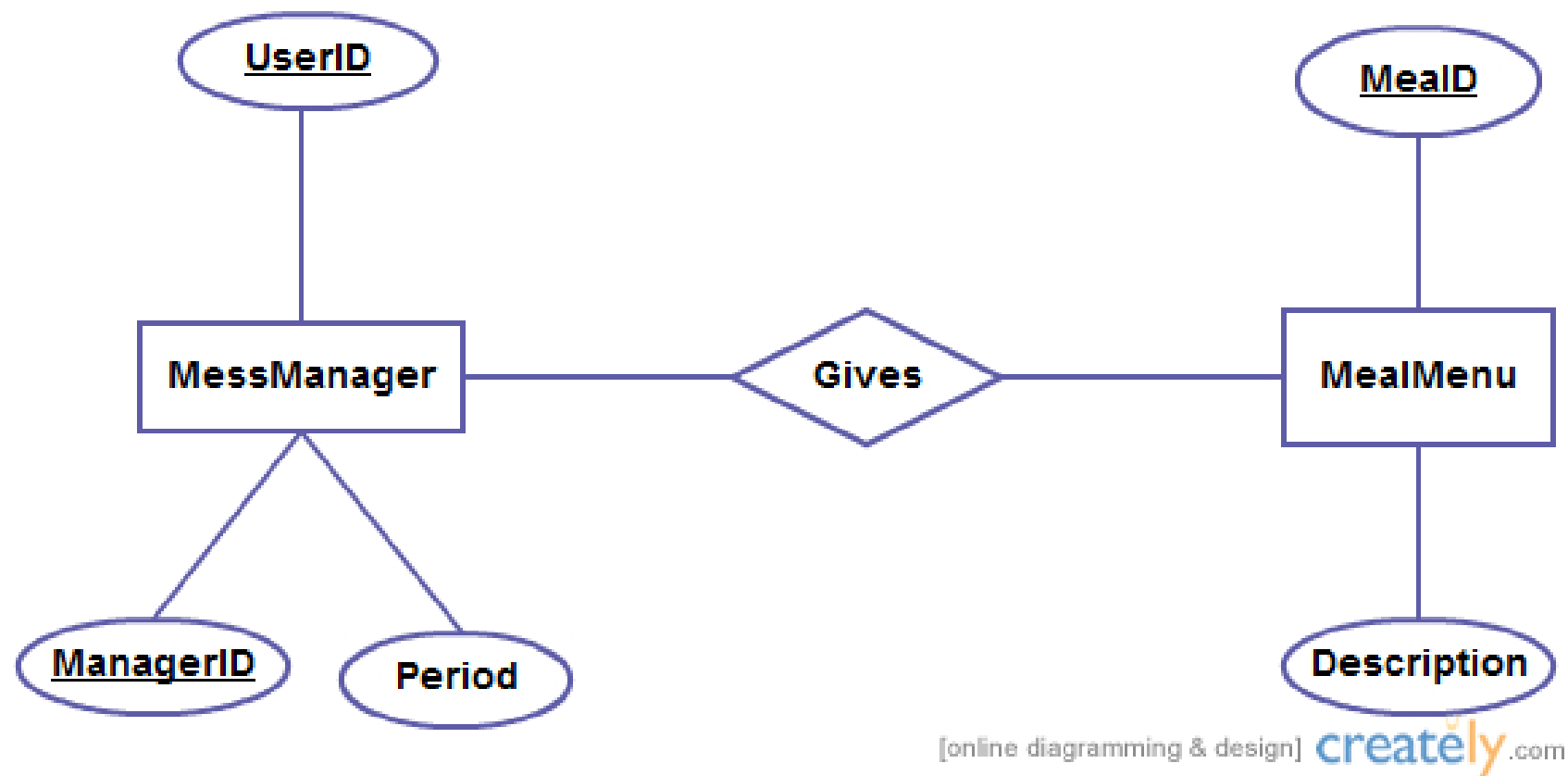


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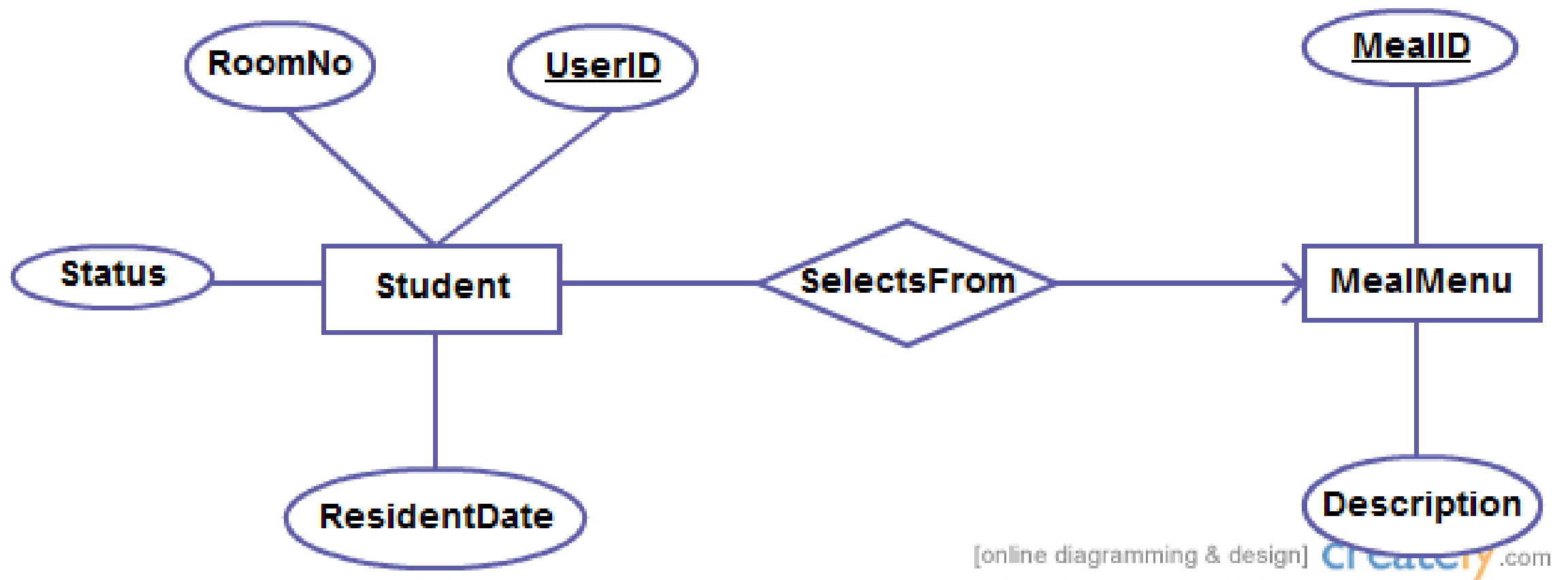


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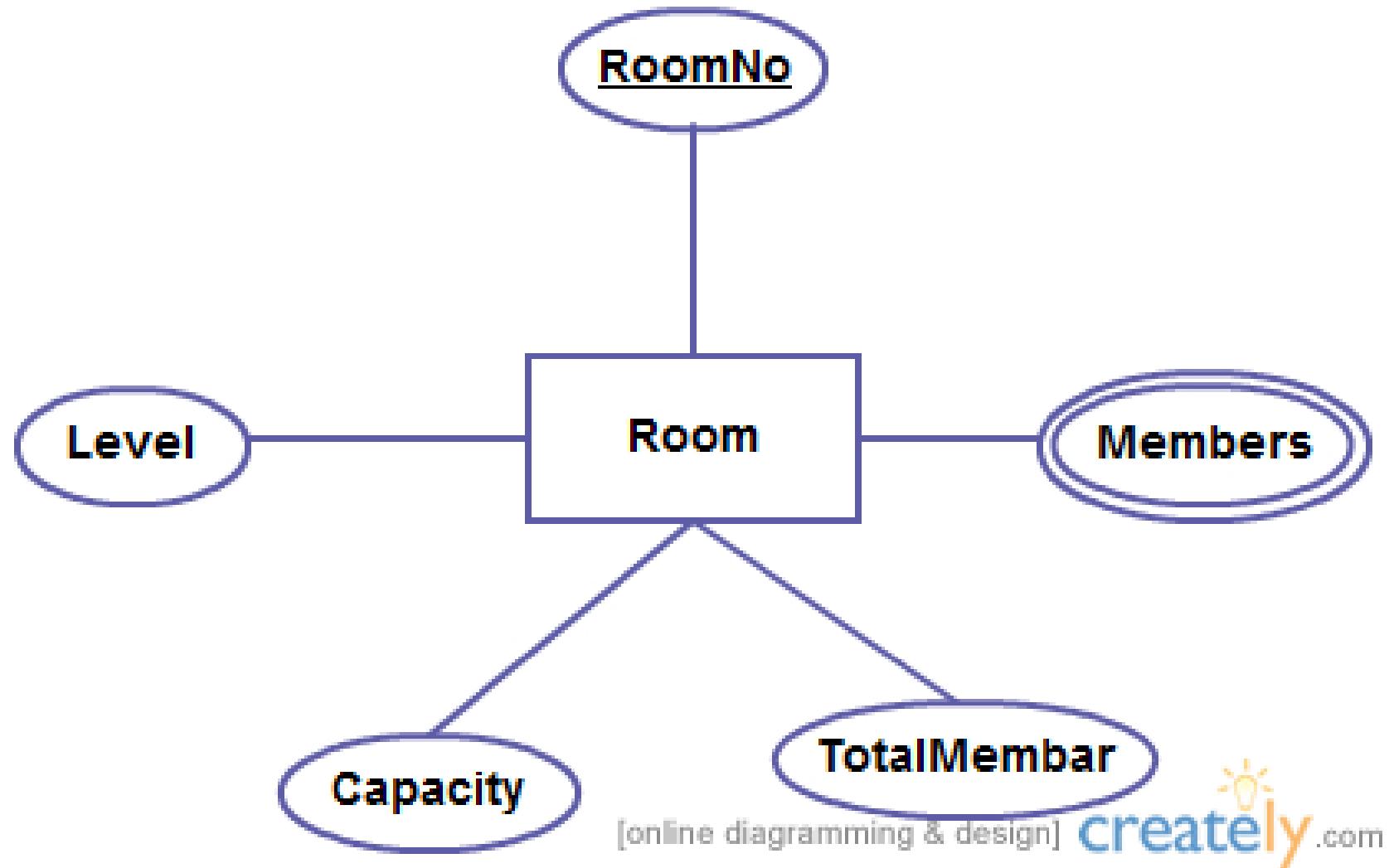


Figure : Entity Relationship Diagram

Database Schema

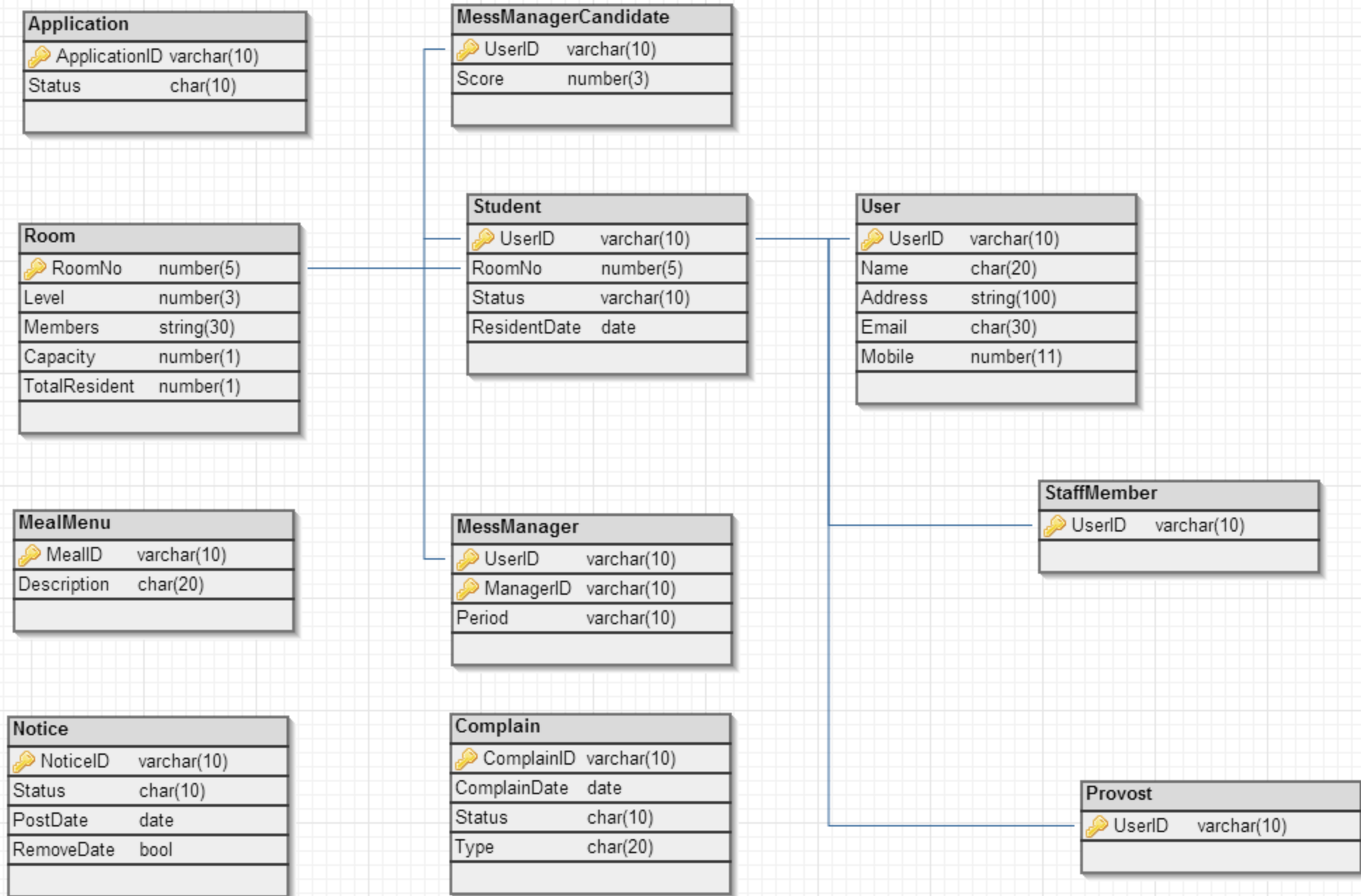


Figure : Database Schema for Hall Management System

Trigger

Trigger 1

- **Trigger Name:** defaultMealSelection
 - **Time of Execution:** After Meal selection timeLimit ends and isMealSelected sets to NO.
 - **Actions:**
 - Commands: SelectDefault
 - Attributes: MealID
 - Tables: Meal
 - Remarks: To prevent issues when no meal is selected by a student.

Trigger 2

- **Trigger Name:** startVoteCount
 - **Time of Execution:** After isVotingFinished sets to YES
 - **Actions:**
 - Commands: Count
 - Attributes: studentID
 - Tables: Mess Manager
 - Remarks: To process result count when voting is done.

Trigger 3

- **Trigger Name:** deleteExpiredNotice
 - **Time of Execution:** After noticeStatus sets to EXPIRED
 - **Actions:**
 - Commands: delete
 - Attributes: NoticeID
 - Tables: Notice
 - Remarks: helps maintenance easy and up to date with most important notices.

Trigger 4

- **Trigger Name:** makeStudentResident
 - **Time of Execution:** After isApproved sets to YES
 - **Actions:**
 - Commands: makeResident
 - Attributes: StudentID
 - Tables: Student
 - Remarks: Autoupdate resident status after being approved by provost.

Procedure

Procedure(1)

Procedure Name	getResidentStudentList
Time of Execution	Provost has to submit monthly a resident list to the administration office
Input	Nil
Output	List of names of resident students and the date of their being resident
Apply on	Student

Action	Remarks
Select name and date of being resident from Student	Select the name and resident date from table Student where status = 'Resident'

Procedure(2)

Procedure Name	getMealList
Time of Execution	When the provost wants to see if any mess manager is managing meals okay
Input	Date1, Date2
Output	List of name of the meals that are served within Date1 and Date2
Apply on	Meal

Action	Remarks
Select meal from Meal where date of meal \geq Date1 and \leq Date2	Select all the food meals from the table Meal and showed in a ascending order by date

Procedure(3)

Procedure Name	getRoomMaintenanceComplain
Time of Execution	Any time a student posts a complain that is under Room Maintenance it is immediately acknowledged
Input	Nil
Output	List of name room and the problem description
Apply on	Complain

Action	Remarks
Select complain from Complain where type = 'Room Maintenance'	This type of problems are served immediately by the staff members

Procedure(4)

Procedure Name	getExpiredNotice
Time of Execution	Any time a student wants to see those notices that are old and expired
Input	Date1, Date2
Output	List of notice along with their publishing date
Apply on	Notice

Action	Remarks
Select notice from Notice where publishingdate is \geq Date1 and \leq Date2	Select all notice from Notice within Date1 and Date2 and showed in a ascending order by date

Procedure(5)

Procedure Name	getRecentResidentList
Time of Execution	When a provost wants to see the resident students that joined recently
Input	Date1
Output	List of recently resident students that joined after Date1
Apply on	Notice

Action	Remarks
Select name and student_ID from Student where date of being resident >= Date1	Show the name and student_ID from Student in an ascending order of date

View

View 1

Election view: Here the students can see the selected candidate list for voting in the mess manager election.

View 2

- Notice view:

Here students can see the published notice by the hall staff members.

View 3

- Room view

Here the list of the rooms which are empty is supplied to the hall supervisor. After having the supplied list he can assign the eligible student an empty room.

Role

Role 1

- create role provost_role;
- grant all privileges on
Application
to provost_role;

Role 2

- create role supervisor_role;
- grant all privileges on **empty room** to supervisor_role;