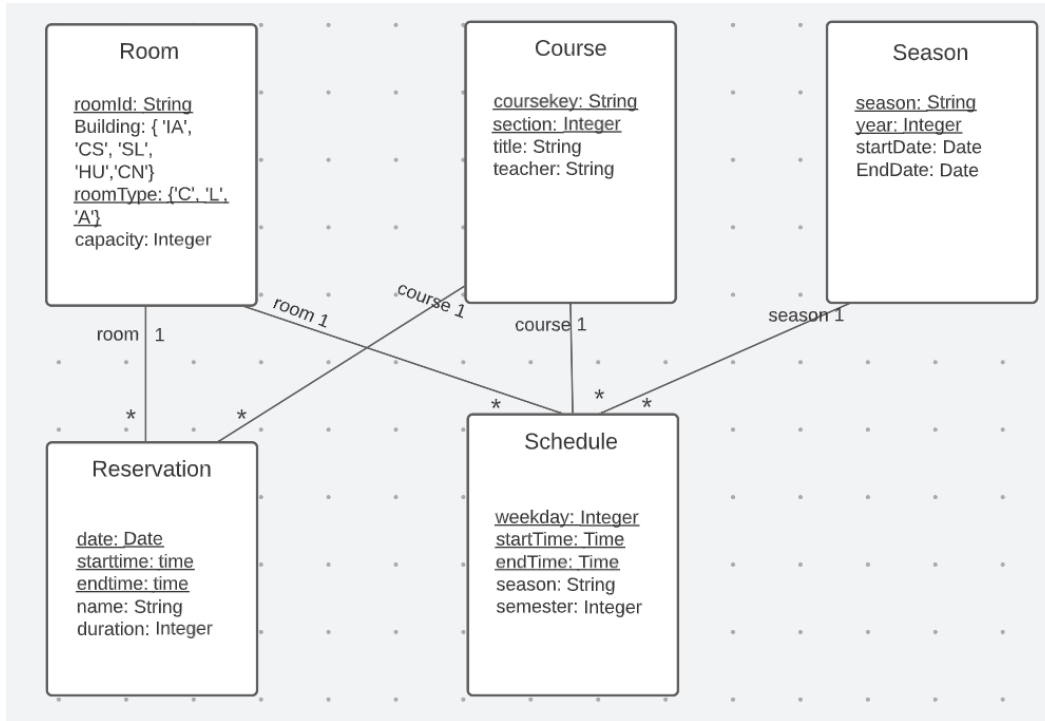


UML



ROOM

Each ROOM has a ROOMID and a ROOMTYPE it is inside a BUILDING and has a limited CAPACITY.

COURSE

Each COURSE has a TITLE, a COURSEKEY, and it can have one or more SECTIONS, depending on it, it can have a different TEACHER.

SEASON

Each SEASON happens during a specific YEAR, and it has a STARTDATE and an ENDDATE.

RESERVATION

For having a RESERVATION, you must know the date where the classroom was reserved (DATETIME) the DURATION of the usage which ROOMID is going to be taken and by who (NAME)

SCHEDULE

Each ROOM has a SCHEDULE where different SECTIONS of COURSES are given, in a WEEKDAY on a specific SEASON and YEAR

DESCRIPTION OF THE FUNCTIONS (Technical Specifications): (all the code is in the directory of the application)

private void dumpResultSet(ResultSet rset)

- This function dumps the result of a query in terminal.

private void query(String statement)

- This function uses the method of the library java.sql.* executeQuery and then calls the method dumpResultSet() with the query executed.

private boolean sePuedeInsertar(String starttime, String endtime, int weekday, String roomid)

- This function does the same thing that the triggers in the database but in the application, since we have the triggers, this function is commented out of code, this function checks that a tuple of reservation or schedule does not overlap with other tuple.

private void close() throws SQLException

- This function closes the sql connection.

private int diaDeLaSemana(String fechastr)

- This function receives a String with a date YYYY-MM-DD and returns a number, being 1 Monday and 7 Sunday.

private boolean menu()

- This function has all the cases of the menu, the function returns always true after a case except if the case is close that returns false.

(0) Register SEASON

(1) Register COURSE

(2) Register ROOM

(3) Room Check

(1) Toda la información de todas las habitaciones

(2) Capacidad de todas las habitaciones

(3) Tipo de todas las habitaciones

(4) Información de una habitación en específico

(4) Room Reservation

(1) Habitaciones ocupadas

(2) Habitaciones libres en un día y hora específicos

(3) Reserve una habitación en una fecha y hora específicas

- (4) Cancelar reservacion con fecha y hora especificos
- (5) Schedule
 - (1) Agregar un Horario\n
 - (2) Modificar la programación de un curso
 - (3) Eliminar un curso
 - (4) Horarios
- (6) Aceptar todas las operaciones realizadas
- (7) Salir

`public static void main(String arg[])`

- This function is the static void main of java, that executes the function menu when is true, and end the application when is false