StudentClassOffering Student CourseOffering student id: int student_id : int int cid(CouserOffering_id) autogenerated courseoffering_id: int first_name : String int course id; last name: String String classroom; email : String int studentNum; status : String insertStudentAndClassOffering(StudentClassOffering List<CourseOffering> getCourseOffering(); studentClassOffering); List<Student> getStudent(); List<CourseOffering> getCourseOfferingByCourseID(int void insertStudent(Student student); void courseID); deleteStudentAndClassOffering(StudentClassOffering void deleteAll(); void insertClassOffering(CourseOffering classOffering); void updateStudent(Student student); studentClassOffering); void updateClassOffering(CourseOffering classOffering); void deleteStudent(Student student); List<Student> getStudentByClassOfferingID(int void deleteClassOffering(CourseOffering classOffering); List<Student> getByName(String first_name, courseOfferingID); List<CourseOffering> List<CourseOffering> getClassOfferingByStudentID(int String last_name); getCourseOfferingByCourseName(String class_name); Student getByID(int studentID); id); CalendarCourseOffering Attendance Course Date date int student_id; int courseOffering_id int course_id int courseOffering_id; String class_name Date date; boolean status void insertCalendar(CalendarCourseOffering calendar); boolean attend; int number_offerings void deleteCalendar(CalendarCourseOffering calendar); List<Date> getCalendarByCourseOfferingID(int void insertAttendance(Attendance attendance); List<CourseOffering> getCourseOfferingByCourseID(int courseID); courseOfferingID); void deleteAttendance(Attendance attendance); List<CourseOffering> getCourseOffering(); List<CourseOffering> getCourseOfferingByDate(Date void updateAttendance(Attendance attendance); void insertClassOffering(CourseOffering classOffering); date); Boolean getAllAttendanceByStudentIDDateCourseOffering(Date date, void updateClassOffering(CourseOffering classOffering); int student_id, int courseOffering_id); void deleteClassOffering(CourseOffering classOffering); List<Integer> getAttendPerformanceByTime(Date start, Date end, int courseOffering id);

*red means primary key

Many-to-manty relation: Student-CourseOffering One-to-many relation:

Couser-CourseOffering
CourseOffering-CalendarCourseOffering
Student-Attendance
CalendarCourseOffering-Attendance