

A)

The diagram is the other PDF file.

Assumptions:

1. Students will identify the course name from the course ID.
2. Students must be computer literate enough to navigate the website.
3. Standardized interface for all courses. All courses use the same type of entities.

Constraints:

1. A student can have only one ID.
2. Any member is allowed to comment on the forum.
3. Students cannot modify files.
4. The student must be registered.

B)

STUDENT(Student_ID , *User_Name*, Password, Picture, Email_Address, Cellphone_Number)

COURSE(Course_ID, Year)

GRADEBOOK(Due_Date, Grade, Gradebook_Items, Comments)

FORUMS(Threads)

RESOURCES(Size, Modified, Created_by, Title, Access, Actions)

ACTIONS(Copy, View_Details)

TESTS_&_QUIZZES(Assessments, Time_limit, Due_Date, Title)

ASSIGNMENTS(Instructions, Title, Due_Date, Late_Due_Date, Submissions_Allowed , Closure_Date, Status, Date_Modified, Additional_resources)

C)

STUDENT

Student_ID Password -----> *User_Name* Picture Email_Address Cellphone_Number

GRADEBOOK

Gradebook_Items -----> Due_Date Grade Comments

RESOURCES

Title -----> Size Modified Created_by Access, Actions

TESTS_&_QUIZZES

Title -----> Assessments Time_limit Due_Date

ASSIGNMENTS

Title -----> Instructions Due_Date Late_Due _Date Submissions_Allowed Closure_Date Status
Date_Modified Additional_resources

D)

The relation schema is in third normal form since there are no values in any table that are directly derived from other entries in the same table thus being void of no transitive dependencies.

E)

Application is the java file.

Use

Java -cp /usr/share/java/mysql-connector-java.jar:. A

To run the program after compiling.

F)

Ahmad, M(AHMMAN001) did part B

Deeljore, R(RHLDE001) did part E

Mathevula, M(MTHMIC012) did part C

Manxoyi, S(MNXSIP008) did part A

Skungwini, A(SKNAND004) did part D