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CS 452 Project Schema

Students ( UserID, UserName, Password )

Classes ( ClassID, ClassName, ColorName )

StudentClasses ( UserID, ClassID )

Foreign Key UserID references Students

Foreign Key ClassID references Classes

Assignments ( AssignmentID, AssignmentName, ClassID, DueDate, DoDate )

Foreign Key ClassID references Classes

The Students table contains the students (or users) and represents those students/users. This table is a sort of pivot point for the other tables because without a student/user, the class and the class’ assignments aren’t important to the app (it would just be info).

The UserID column is an identifying number to distinguish students/users. It will make it easier if someone changes their username so we don’t have to change the username in other tables. This is the primary key.

The UserName column is an identifying string that the user can use to log in. (is a type of external key)

The Password column contains the password for that user to log in to the app.

The Classes table contains the classes a student/user is enrolled in. The way we will have it set up is that there aren’t multiple students with the same class since a user can add/remove assignments and we don’t want that to affect other users’ schedules. That is why there is a UserID value in the Classes table. This table represents the classes students might be in. The Classes table is a sort of parent or umbrella for assignments while being related to students because students have them.

The ClassID column is an identifying number to distinguish classes. It will make it easier if someone changes the ClassName so we don’t have to change the ClassName in other tables. This is the primary key.

The ClassName column is an identifying string that the user/student gives to identify. (is a type of external key)

The ColorName column is a color that will be used when displaying any information for that class (the name, or even assignments for the class)

The StudentClasses table contains the classes a student is in. This represents the student’s enrollment. This table links the Students table and the Classes table. It is necessary to keep 2NF (we thought about putting UserID into the Classes table but that violates 2NF).

The UserID column is an identifying number to distinguish students/users. It will make it easier if someone changes their username so we don’t have to change the username in other tables. This is part of the composite key and is a foreign key.

The ClassID column is an identifying number to distinguish classes. It will make it easier if someone changes the ClassName so we don’t have to change the ClassName in other tables. This is part of the composite key and is a foreign key.

The Assignments table contains the assignments for a class. This represents the assignments the student/user has. A class (from the Classes table) has assignments.

The AssignmentID column is an identifying number to distinguish assignments. It will make it easier if someone changes the AssignmentName so we don’t have to change the AssignmentName in other tables. This is the primary key.

The AssignmentName column is an identifying string that the user/student gives to identify. (is a type of external key)

The ClassID column is an identifying number to distinguish classes. This is a foreign key referencing the Classes table.

The DueDate column is a date of when the assignment is due.

The DoDate column is a date of when the student/user plans to do an assignment.