CSC 310 Final Project Description by Michael Jarman

Band Program Database

This access database is designed to help a band director keep track of important information regarding their band program. It is a relational database that stores data not just about inventory, but students and their relationship with the band and their equipment. All too often in the music education world, important information is recorded on a Microsoft Word document with inconsistent errors, or a spreadsheet that isn’t kept up with, or handwritten and forgotten about. This database is designed to tackle all the problems that come with these kinds of poor record-keeping and ensure that the information the director needs is readily available. Each student has information about themselves, but it is important to track far more than just personal info. This database handles student information, ensemble participation, instrument and uniform inventory, sheet music cataloguing, and student involvement with the ensembles and their assigned assets.

As the database is opened in Access, the user is presented with a main menu, with the first page being the student roster. From this page, the user is presented with a roster ordered by last name of all their students in the band program. From here, it is easy to find any other desired information. The ensemble roster is the next tab. When selected, it will prompt the user for which ensemble they would like to view the roster of. Next is StudentComplete\_By\_StudentID. This tab will prompt the user for a student ID number, which can be viewed from the Student Roster. Once a student is selected, it gives a complete record of the student’s personal information and all assets assigned to them. Next is StudentEnsembleParticipation\_by\_StudentID, which will show the ensembles the selected student is in, along with details about their participation, including their instrument and chair. Next is StudentInfo\_By\_StudentID, which only shows personal student info.

After these reports, the following tabs are entry forms for the database, which allow the user to enter data into the database and alter existing data. First is StudentJoinsEnsemble, which will allow the user to submit information about a student that has just joined an ensemble, assigning them their assets, etc. Next are a series of \_Entry forms, which allow the user to enter new entities into the database for tracking Students, Instruments, Uniforms, and Sheet Music respectively.

Lastly, the user can select from a series of \_Add forms, which allow the user to create new meta-entities. These consist of any new ensembles the user wants to create, any new instrument types not currently included in the database, and new instrument families outside the five main instrument families.

This database is designed to keep consistent data accessible describing the band program. All assets have unique ID’s, all students have ID numbers, and all entities have identifier numbers, which help to ensure that duplicate or inconsistent data is caught before it is recorded and forgotten. The program is designed to be simple and easy to use and ensure that a band director will always have crucial data available, and the tools to work with that data.