Trentoniana Room Database | Group 9

Michael Mongelli, Ally Rizzo, Zack Rich, Ashley Bennet

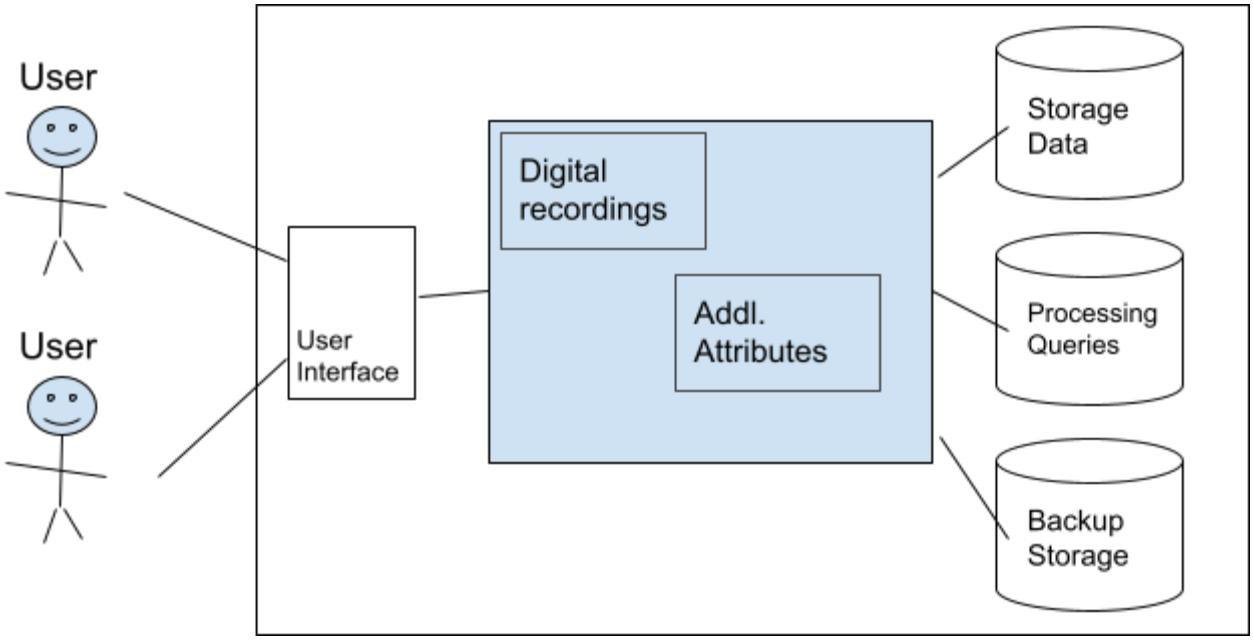
- Problem Statement: The Trentoniana Room has recently acquired a number of audio recordings from people of Trenton containing an oral history of the local area, however the data is unorganized and uncategorized.
- Objective of the module: To establish a database to store the audio recordings of the Trentoniana Room in a more organized fashion which also gives the user an easier way to search for files based on certain identifying criteria.
- Description of end product: by the end of the project we aim to have a functional user interface to interact with the database we will set up to store these audio files, as well as multiple criteria we will use to categorize the recordings by topic, where it was recorded, and who performed it. In addition to searching the recordings by categories, we may introduce a search bar where users can query the recordings to find files by relevant strings.
- Important of module: We believe this module will be a very useful addition to the Trentoniana Room site. The recordings offer a rich history of the local area, however it lacks a tool to properly find what one may be looking for or interested in listening to. In addition to this, categorizing the files also provides useful context to them which can help further one's understanding of it as they listen, and may help to reveal patterns among similarly categorized recordings.
- Researching problem domain: having a linguistics student who is familiar with the project will greatly help us in our design of the database and will help us to understand the importance of how we will help to organize it relevant to the

needs of the listeners of these recordings. It may also be helpful to understand exactly how these recordings will be used, and we may gain inspiration from other sites containing public historical records such as these.

- Similar systems: many libraries and other sites use similar database systems as we will create for this project, thus we will look at these systems for guidance and inspiration for ours.
- Other applications of the system: The system could be utilized by similar those with similar needs, for example, local libraries which may still have not updated their websites to be very user friendly yet. This system may also be useful in other settings, for example, possibly to set up an online menu for a restaurant's site.
- Performance: Since the site does not have a very large number of recordings, performance should not be a huge issue, being that this database will be working on such a small scale. However, it is possible they may add more in the future, and it is best if the system is built in such a way that it could handle an increase in content without a decrease in performance, at least to a certain amount of stored data.
- Security: for valuable data such as this, which contains historical records, it is important to ensure it is safe and preserved. Thus, we will try to ensure our system is not vulnerable to common and easily avoidable attacks, such as SQL injections for example.
- Backup and recovery: as mentioned above, it is important to ensure these historical records are preserved. Thus, if an attack were to occur, we would like

for our system to be prepared to reupload the recordings should the public ones be corrupted in any way.

- Technologies and database concepts: Our team will need to learn how to set up a database, how to upload our data, add attributes and make relationships between the data, how to store the data and make it available for access, how to back it up, and how to protect it. We will use resources from class material as well as online resources to master these concepts so we can use them to build our application and will work as a team to ensure we all understand tools we use to build this database and its UI.
- System boundary diagram:



Project Name

Michael Mongelli, Ally Rizzo, Zack Rich

Need	**Approach**

Our customer in this case is the Trentoniana Room of the Trenton Library. They need a more organized way to store their recordings of oral histories such that users can easily find recordings and categorize them.	We will approach this project by first learning how to properly set up a basic database and then slowly tailoring it to the needs of this project, incorporating the possible queries and search methods we would like to have available.
Benefit	**Competition**
By the end of this project, our stakeholders will have a fully functional UI and database they can use to store and organize their data. This will make access and use of these recordings much easier for those familiar with them such as those in the linguistics dept, and for people of the public to make sense of them and have context if they should access them.	We would like for our system to have a superior user interface, making it easy for users to find the information they need. We also want ours to be scalable should the Terentoniana Room add more recordings in the future, and we want it to be secure. With all these features (usability, scalability, and security) we believe we will offer a competitive system.