Phase VII - Final Report

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CSC 315 - Databases

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Our project includes two topics, the progeny report, which is the partner suggested topic, and a family tree that we came up with and implemented on our own. The progeny report allows the user to search for a specific tag of a goat and display the information of that goat. We also wanted to come up with a way to view the report for each goat using a more efficient method. For our own idea, we decided that when the user searches for a specific goat using its visual tag it will display a family tree using the information about their dam and sire. The goal of this family tree is that we want the user to be able to visualize the relationships between the goats. We think our idea makes it easier to find information on a specific goat or family lines, and our idea allows more in depth searching for goats by utilizing both searching for tags, as well as navigating the family tree. By combining these features and being able to navigate between the family tree and the progeny report of a goat, our partner will be able to more efficiently search the data about their goat breed and therefore look deeper into the development of the breed.

Our goal in the creation of a goat’s progeny report was to provide an interface that displays key information about individual goats. The information that we wanted to include primarily consisted of an individual goat's weight(s) over their lifespan. We had an initial goal to also include a way of displaying and identifying goat trends via graphs/plots. Of these goals we were successful in providing an interface that displayed key information such as the records of a goat’s weights over their lifespan, however, we were unable to incorporate visual analysis of trends.

Our final implementation of a goats progeny report was able to provide a list of a goat's recorded weights such as birth weight, live weight, etc. Our progeny report was also able to provide data on a goat's kid(s) starting with the number of kids the goat had of each sex. We alos included a table that includes each kid's sex, date of birth, tag number, and their current status. In addition to this, our progeny report included all of the available notes of a goat. Overall the results we obtained for the progeny report were what we wanted and we were successful in showing all the information that we planned to, besides graphs and visuals. If we were allotted more time we would have been able to figure this out, but we did accomplish a lot and the main goal of the site was accomplished. We were able to create the progeny report, and we are happy with the results of this part of the project.

For the family tree our goal was to display a family tree of goats in relation to one another. We then wanted to create a "finding" button to search for a specific goat in the tree. We also were hoping to provide additional information and use graphs or plots where necessary to to help display trends/correlations. We were able to display a family tree of goats in relation to one another. We also made it easily accessible, as the homepage can be used to search for a goat using their tag leading to either their progeny report, or family tree consisting of parent(s) (if known), and any kids. When the user searches for a goat's family tree it shows the current goat (the one searched for), its parents and kids. It also displays the tag and sex of each goat. Additionally, each goat's "node" includes buttons that can take the user to the progeny report for that goat or to the family tree that has it as the current. The user can also click a button to go back to the home page, making the site easy to navigate through. Overall, we did mostly accomplish what we had hoped, except our original hope was to make the family tree look more like an actual tree rather than just spaces where the goats are, but ultimately the site we have

displays the information sufficiently. If we had more time, we would have been able to work more on the looks of the site and found a way to create an actual tree, but we are content with our result for this part of the project and we were successful in making the family tree we had hoped for.

Through our implementation of both the progeny report, and the family tree, we made viewing the data within the database of our partners' goats much easier. It is now much faster and efficient when trying to find information on a specific goat, or their family lines. The process of gathering this data is also much more efficient as it can be accomplished with a single interface. We also were successful in allowing more intuitive searching via tag number, or by navigating the family tree. A combination of all of these features makes for a much easier process when searching for specific data regarding our partners goat herd. This feature makes it effortless when navigating through the site, since a goat's progeny report can be found from our family tree page. It is also trivial to get from any page to the home page, if the user wants to go back to search for a new goat. We hope that with the use of our progeny report and family tree, our partner can better develop and manage their overall goat herd.

In the future we hope that our partner will make use of our database by expanding upon the family tree, hopefully allowing for a larger visual representation of the herd as whole. In addition to this we hope that our original goal of including a visual representation of statistical analysis can be incorporated into the goats progeny reports. This can help our partner with data analysis allowing for an even easier time in furthering and bettering the herd as whole. We were successful in creating an implementation of a goats progeny report, as well as showing a goats family lineage through a family tree. Although our database can be improved upon in many ways, we hope that our implementation of these ideas will aid our partner in their journey of

making goats a primary source of livestock as they continue to breed, sell, and expand their goat farm.