Villages at Dardenne Needs a Website

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Since 2020, the neighborhood website has been defunct. This previously was a valuable tool that shared information to all residents and housed the governing documents so that residents could go see the requirements before submitting requests for maintenance or architectural improvements. The purpose of this proposal is to start that website from scratch once again and allow it to pull resident data from a database in order to send out communications. To understand the website structure, one must understand the neighborhood structure. There is a Master homeowners’ association (Master) that is made up of each of the eight smaller “Villages” containing both single family homes as well as townhomes or villas – Bates Village, Lewis & Clark Village, Campbell Village (townhomes), Prairie Village, Prairie Villas (townhomes), McCluer Village, Cheneaux Village, and Oakland Village. Each of the eight Villages has its own homeowners association board. One member from each Village board represents their Village on the Master Board. Each individual Village has a set of covenants, conditions, and restrictions (CC&Rs) as well as the Master Association have its own indentures that govern the common amenities. The Master budget goes towards the common amenities that all residents of the Villages can utilize. Common amenities includes three swimming pools, over ten miles of walking and nature trails, nine ponds, a clubhouse, and tennis courts. Each Village has its own budget that goes towards items like landscaping and lighting.

The structure of the website would be similar to that of the neighborhood – a Master website that showcases the Master, common amenities with individual pages for each Village and the amenities within them. The Master web page will house links for the Master indentures as well as a budget spreadsheet that is updated monthly and feeds from a database. One issue residents have had over the years is a lack of access to financial information to see where the annual dues are going. This should solve that problem when residents can check the financials as they are updated each month. Another major aspect of the Master webpage is the ability for Board Members to send messages to residents via email. This will not be a function that each resident will have the ability to utilize but will only have access from select Board Members. The contact information for residents will flow from the database held by the management company so it is up to date as residents move in or out of the neighborhood and does not need to be maintained directly by the Board Members. The Master webpage will also potentially utilize an algorithm that pulls in events in the surrounding area so residents can see activities happening nearby. The Master page will also link to the management company website where residents can pay their monthly or annual dues. As the management company already uses this software for their other communities, it is not necessary to “reinvent the wheel” when it comes to payment of dues. Residents already have access to this portal. The Master webpage will also have the information, calendar, and forms to request rental of the clubhouse as well as any of the pools. This is a new concept for this year which will allow residents to rent a pool for their own parties either before or after normal pool hours. The idea behind the Master webpage is to be the main landing page and each resident can utilize the information contained within to navigate to their individual Village page from there.

Each individual Village page will have newsletters as well other information for each specific Village. As a Board Member for a single Village, I will need to rely on other Board Members to update their pages on a regular basis. For the purposes of this project, each individual Village webpage will not have as robust information as my Village – McCluer Village – due to time constraints of getting each Board Member up to speed on how to access and update. However, that is a project that will come together in time. Each individual Village webpage will also house financial information, Board Member contact information, and showcase its amenities.

The design documents can be found below:

Villages at Dardenne Master Homepage

Board Members

Name: string

Amenities

Contact Info

Name: string

Address: string

Email: string

Phone: int

Financials

Oakland Village

Cheneaux Village

McCluer Village

Campbell Village

Prairie Villas

Prairie Village

Lewis & Clark Village

Bates Village

Amenities

Board Members

Financials

Figure 1: Website Structure

Villages at Dardenne Master

Village\_ID

Name: string

Name\_ID

Address: string

Email: string

Phone: int

Figure 2: UML Diagram

Resources & References

The primary resource will be my nearly 5 years of experience serving on the McCluer Village Board as well as Master Board president. During this time I have compiled data for all things in my neighborhood so that I can share should anyone ask. I have only been asked a handful of times for any sort of data to justify decisions that have been made. In order to make the project be as useful to residents as possible, I must also seek resident input via interviews and possibly create scenarios and user stories that determine what residents may want to see in a website that is intended to benefit them.

Additional resources are likely to include an algorithm modeler that can pull data from other resources including but not limited to event calendars in the local area and perhaps other neighborhood Facebook pages. The project will also weigh heavily on the data that the management company holds including resident contact information and use of the shared calendar housed on the management company website. A non-exhaustive list of resources is below:

* TreeStone Properties Management Company: <https://www.treestoneproperties.com/>
* Machine Learning Algorithm for Pool Attendance: <https://www.qlik.com/us/predictive-analytics/predictive-analytics-examples>
* Neighborhood Facebook pages
* Swim Team website: <https://dardennedevilrays.swimtopia.com/>
* Database: <https://www.mysql.com/> or <https://www.postgresql.org/>
* Neighborhood Database Sources: <https://stackoverflow.com/questions/6347275/does-anyone-know-of-a-free-neighborhood-database>
* Additional resources as development progresses

Schedule

The anticipated schedule is as follows:

Week 1 (March 17 – 23): Conduct interviews, create scenarios, and develop user stories

Week 2 (March 24 – 30): Build out main and subpages with relevant information

Week 3 (March 31 – April 6): Work on each webpage with design aspects and refine information contained within

Week 4 (April 7 – April 13): Link database(s) where appropriate to allow communications

Week 5 (April 14 – April 20): Submit final project