

fINAL pROJECT two

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IT-415

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**I. Project Plan**

**Work Breakdown Structure**

In the above Gantt chart, you can see that the start date is October 3, 2022. Phase one will take place of the span of 3 months with an end result of a working asset management system. During the first month both of GasBuddy's locations will begin the process of collecting their hardware asset. Within this phase all desktops, printers, modem, servers, hard drives, and any other type of IT hardware will be logged into an excel spreadsheet and sent to the chief information officer. The next phase is implementing the data into the Microsoft Access database, but it cannot begin until we have successfully collected all the assets from phase one. Without that data and accurate documentation, we run the risk of missing or miss prioritizing the assets, which could cause inaccuracy within the SEC. This tool was decided upon because of its ease of use, ability to print cohesive reports and the price of usage for licenses. Within phase two we will then enter all the data collected into an organized and easy to navigate form. Access will allow us to update new assets and keep track of changes amongst all assets. This phase of the project will commence in November and last until December of 2022. Phase three of this phase will begin in December of 2022 and within this phase we will begin to test and make adjustment to any direct correlation between keys within the grouping and its related outputs.

**Timeline**

The proposed timeline from gathering to completion is six months with a holiday break scheduled after the implementation phase. The Asset Management System is scheduled to commence on October 3, 2022, with the gathering of inventory of the two sites of GasBuddy. This will continue to first week of November. In the second week of November, we will begin inputting the collected data from the inventory taken. This will begin a three week build up. There will be a four-day weekend due to Thanksgiving and we will pick back up on the 28 OF November. Coming back from the first scheduled holiday, Will begin creating the tracking for the assets, configure the devices and network, user information and licensing. This is planned to begin on November 30 and last until Christmas eve. The project will not be completed by then due to the Christmas and New Year’s Eve holidays. In the beginning of the new year work will pick back up on January 2,2023. If any changes should occur, a request will be submitted to the project charter and the Board of Directors.

**Dependencies.**

To keep the project moving forward, this project is broken down into phases. Phase two of inputting data cannot start until all assets are inventoried between the two sites. If any asset is missed, we will have to go back and log it and input it into the new asset management system. These stages will be done in sprints to quickly move through phases, keep open communications and to be able to review phases before moving to the next. I will feel like a waterfall approach, but it has a more flexible style aligning with the Agile method. If there are any delays in the phases it will push back the start of the next phase running the risk of going over budget and missing the baseline of deliverables.

**Tools**

The tools needed:

**Microsoft Access**: The database software that will store, analysis, and report information and references. This tool will print reports to help maintain devices, make financial decisions, and show asset usage. The cost is low, and it is a transparent application which on the back end saves on cost.

**Gantt Chart**: Will give visual representation for the progress of the project. It will show work breakdown and timeline. It will help to ensure workflow. This will be combined with the Kanban Chart to allow for open communication and to try to prevent bottlenecking of work. Again, this is a cost saver because it can be done within Excel.

**Microsoft Excel**: Even though it can be used as a basic database it will not be the main database stored within the server. Excel will help collect and temporarily serve as an inventory placeholder. This application will be used by site team members to input the assets that are at their respective locations. It allows us to export the information into Access and start to build the attributes and classes that will eventually become the working AMS. The cost is low because the license for this is all under Microsoft 365.

**Tablets**: They offer portability and ability to be mobile so team members can move around to easily catalog assets. It will be linked to the main offices by remote and WIFI access to upload on the shared excel.

**II System Design Document**

**Introduction**

GasBuddy has expanded locations and to ensure that all assets are properly accounted for an asset management system will be created. The creation of the asset management system (AMS) will allow GasBuddy to monitor the use of its assets, track who has access to documents, track and maintain the lifecycle of their devices, and the ability to create an accurate reporting of assets to the SEC which create transparency to shareholders, equity holder and the board of directors. To clarify the lifecycle of devices, this means the life span of the device starting from its installation, registration and authentication, configuration, monitoring and device software maintenance. The AMS will help prioritize its assets, thus giving GasBuddy a clear sight of where to increase or decrease funding to protect that asset. By being able to see a program can be created within the ASM to monitor and maintenance that asset. In terms this allows for a tighter control over the output of expenses. The new ASM will also allow GasBuddy to keep all devices up to date with current patchwork and lessen the chances of an attack. The creation of the ASM also allows GasBuddy to consider the usage of current licenses and the ability to configure devices within the company’s infrastructure. The AMDS allows for a visual confirmation giving updates on the current setting of a device and giving the IT team the ability to configure the device to optimize security protocols. With the creation and implantation of the AMDS, GasBuddy will be able to lower its risks, control its financial output, monitor all users, asset and configurations on devices and ensure that all assets that is in the network be properly patched.

**Requirement**

The AMDS shall provide feedback in the form of reports which will include device lifecycle, asset status, and location. The AMDS will provide a schedule for patchwork, configuration and when to consider software updates. AMDS will provide a financial report showing figures that pertains value of hardware, cost of applications licenses, cost of software, total cost to maintain the AMS, and cost of devices. Finally, the AMDS will give GasBuddy control of its bottom-line and security of all assets be it physical, digitally, or intellectually in the cloud.

**Resources**

* Access to GasBuddy’s servers to upload AMS database.
* Full honest reporting from both location IT management team about assets to create a complete snapshot of assets.
* Microsoft Access to build the database
* Microsoft Excel to create the need spreadsheet to collect data from both locations
* Desktops that is hard wired into GasBuddy’s infrastructure to securely upload directly to servers.
* Mobile devices with remote access to GasBuddy network to upload the assets as they are documented and for mobility to be present with asset.
* Gantt Chart to monitor the progression of the project.
* By in from the board of directors and shareholders because if they have buy in the project will have a continuous flow due to the boards’ feeling of ownership with the AMS.

**Constraints**

Possible constraints could be in accuracy of inventory due to human error. This could be from entering the data from the IT team or the database management inputting the data into Microsoft Access. To overcome this possible constraint, a second inventory will be taken to ensure proper reporting. Another possible constraint is that the flow of the project depends on the completion of the prior phase. With three holidays within the work path of the project, push back might occur on certain phases delaying the deadline. These phases are the implementation phase and the input phase. If there is a push back in the project completion date, then the project budget will be affected. The contingency plan for this is to go back to the charter and request an extension within the deadline to occur after the holiday season and create an aggregate plan.

**System Overview**

The Asset Management Database System will use a class diagram basis. It will be broken down into different classes and from there those classes will be tethered using relationship inheritance keys. For example, a class name will be hardware. Under that class you will find things like location, hard drive, switch, router, desktop, etc. In relation to hardware another class will be value and status. When queried to print a report it will produce a print up with the hardware’s name, location, value and if it is online, configuration within the infrastructure and if up to date or not. The functioning of the AMDS is supported by human input and constant monitoring and updating. An employee needs to be aware of the working of the AMDS and keep the database updated to ensure that all assets are in the correct status and proper working state.

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