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**Project Proposal**

**Executive Summary:**

Looking for a solution to prepare students for the real world, Angela Lee, an instructor at Waukesha County Technical College (WCTC), seeks to have a reporting system to use in the Health Information Technology (HIT) program. Using two data sets found on [www.data.gov](http://www.data.gov), a data warehouse will be built for students to use in either an Excel or Tableau software. Students will be able to manipulate the data to glean insights on facilities located in WI. Throughout this proposal, we will cover the following areas: Statement of Problem, Objectives, Who’s Impacted, Implementation Plan, and Estimated Project Time and Budget. These areas embody what it will take to achieve a successful outcome for this project.

**Statement of Problem:**

WCTC’s HIT program lacks real-world data for students to analyze. Currently, the program uses outdated, stagnant data for students to create reports. Angela Lee, HIT Instructor & Program Coordinator, requires an up-to-date data warehouse to enable her students to compare healthcare facility performance ratings at a glance. Additionally, the HIT program teaches various data analytic tools, like Excel, Access, and Tableau. Without a unified data set, students sometimes find the tools and achieving correct results cumbersome.

**Objectives:**

We recommend a new system that will consist of the following:

* Provide a real-world, up-to-date data warehouse for analytical and reporting purposes
  + Two datasets will be used, found on [www.data.gov](http://www.data.gov)
    - Complications and Deaths - Hospital
      * <https://catalog.data.gov/dataset/readmissions-and-deaths-hospital>
    - Healthcare Associated Infections – Hospital
      * <https://catalog.data.gov/dataset/healthcare-associated-infections-hospital-3ca5e>
  + Analysis and reporting will be based on facility rankings
    - Overall rankings in the state of WI
    - Specific to facilities in Milwaukee, Waukesha and Washington Counties
* Document Source-to-Target mapping for ETL procedures
* Create a staging area in the database for ETL procedures
* Ensure the data warehouse can be imported to analytic tools (Excel, Access, and Tableau)

**Who’s Impacted:**

* Angela Lee (HIT Instructor & Program Coordinator)
* Students of the HIT Program at WCTC
* Data Warehouse team

**Estimated Project Time and Budget:**

|  |  |  |
| --- | --- | --- |
| # | Task | Est Effort (hrs.) |
|  | **SQL Data Warehouse Development Tasks** |  |
| 1 | Planning—Design and implementation of SQL Data Warehouse and Staging Area for datasets | 30 |
| 2 | Data Migration—Migrate datasets into staging area and SQL Data Warehouse environment | 25 |
| 3 | Testing—Confirm all datasets have successfully migrated and are accessible in the new Data warehouse and application | 20 |
| 4 | Post Deployment Support—Assistance if any issues arise throughout the Datawarehouse Implementation | 10 |
|  | **General Project Activities** |  |
| 1 | Project Management | 5 |
| 2 | Meetings | 5 |
|  | **Total Hours** | **95** |