

Republic of the Philippines Department of Science and Technology

INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE

DOST Compound, General Santos Ave., Bicutan, Taguig City Tel. Nos.: 8837-2071 to 82 (DOST Trunklines) Telefax No.: 8837-3167 / 8837-6150 www.itdi.dost.gov.ph



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Mrs. Anna Lisa I. Abello IT Capstone Coordinator, MIT STI College, Dasmariñas Cavite

Dear Ms. Abello:

This refers to the project proposal for the IT Capstone Project for fourth-year students enrolled in the Bachelor of Science in Information Technology course. We would like to inform you of the following project milestones of the students working on the project titled, "Visualization Tool for DOST-ITDI Top Management":

VASQUEZ, DUKE NATHANIEL MIRANDA OROC, JOHN LEVI RIVAS PEPITO, VIDELLE AUDITOR VISITACION, RANNEL IBA-OC

The following are the current project milestones:

I. LOGIN

- The project's login feature uses Role Based Access Control (RBAC), which limits user access to the site and modules based on their assigned roles.
- The login includes a system validation function that verifies the user credentials.

II. TERMS OF SERVICE

- The user must first agree to the Terms of Service before they can access the system's modules based on their role.

III. ACCOUNTS-RBAC (Admin)

- The Accounts Module allows system administrators to create new user accounts. They can also view, update, and delete the newly created user and its credentials.
- Administrators can assign roles and permissions to users using the Assignment Module.
- The Role Module enables the creation of corresponding user roles. This will determine what kind of permissions they must access and view the web application.

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- The Permissions Module enables the creation of permissions for previously created roles. This will be used to determine what routing path permissions a role has.
- The Route Module enables administrators to add or remove system routes that users can access.

IV. USER PROFILE

- The user profile module allows the user to view information about their profile.
- The user profile module enables the user to change their profile photo as well as edit some of their information such as their username, email, contact number, and password.

V. DASHBOARD

- The dashboard is made up of the general charts that the user will see. It includes the National Metrology Division (NMD) and Standards and Testing Division (STD), as well as the average and total income of transactions, customer type, payment methods, transaction status, and top customers per province. Most of the charts have been completed, though some are still being worked on.
- The dashboard also includes chart filters, which allow the user to view the chart on a different chart type based on the options available.
- The dashboard module can also generate a pdf of all the charts on the dashboard. Since some of the charts aren't finished yet, the pdf will be updated once all the charts have been finished.
- The date filter for this module is still in progress.

VI. DIVISION CHARTS

NATIONAL METROLOGY MODULE

- This module consists of the charts from the NMD. The data hasn't been modified yet, but the charts displayed without the data are mostly done.
- This also has chart filters and a pdf generation function.
- The date filter for this module is still in progress.

STANDARDS AND TESTING MODULE

- This module consists of the charts from the STD. The data hasn't been modified yet, but the charts displayed without the data are mostly done.
- This also has chart filters and a pdf generation function.
- The date filter for this module is still in progress.

PREDICT CHART MODULE

Predict Chart is made up of a simple prediction algorithm that employs the Linear Regression mathematical formula. This can forecast the overall total income and transactions based on the year selected by the user. This can also generate the two divisions' total income and transactions. Because of the data structure, this is still a work in progress, but the functions are operational.

The students have achieved significant progress in the "Visualization Tool for DOST-ITDI Top Management" project. They have covered crucial aspects like login controls, role-based access, dynamic dashboards, and division-specific charts. Although some work are still ongoing, features like chart filters and simple prediction algorithms are already operational. The project's outlook is promising, and we're excited to see its continued growth. We eagerly anticipate the project's continued progress and eagerly await its completion.

Thank you and best regards.

Sincerely yours,

Jose Mari B. Manalo Supervising Science Research Specialist Management Information Systems (MIS) Section Planning and MIS Division (PMISD)

Reviewed by:

Dr. Zorayda V. Ang Deputy Director – ATS and OIC, PMISD

Noted by:

Dr. Annabelle V. Briones Director