Web application development for RGP (Rio Grande Project (EL PASO) – Phase VI)

Department of Interior

- **Scope**

Relevance: Recent trends in web application development suggest that the web is turning dynamic, and soon static HTML content will get replaced by the dynamic web pages. A similar web development project under the U.S Department of the Interior has been awarded to Tri-Force Consulting Services, Inc.

The project is about water resource management, and several reports have to be prepared, the basis of which is data related to the water resources. Tri-Force Consulting Services, Inc. has been serving the needs to convert the static content of the reports into dynamic content so that recent updates are easily reflected, and the corresponding changes are easily made in the database.

As per the requirement of our government clients, Tri-Force Consulting Services, Inc. provided customized report generation and views in formats such as .pdf and Excel. The privileged user can modify the content through form based submission. Acknowledgement is provided on successful update in database or in case of errors (e.g. connection to database could not be established) if any.

Highlights

Creating/Editing reports from the web browser, and saving the changes into the database.

Efficient Database access-multiple reports are generated by accessing a single database table.

Virtual Forms for efficient data entry and processing. Only a part of the form data gets processed without affecting the complete form data resulting in increased speed.

Providing acknowledgment messages about errors/modifications in the database.

Maintaining reports for longer duration-preventing data to be overwritten so that previous reports can also be retained for at least two years (as per the contract).

Extensive testing-navigation of pages, browser compatibility testing, performance testing for database access and query response time

- **Technology Stack**