Geoportal: Geographic Data Visualization

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Problem Formulation

How to develop efficient and usable representation of environmental data.

How to design a Geoportal able to display geographical information that manages and manipulates data from different resources.

**Justification.**

Environmental researchers need multiple software applications to analyze environmental data and to represent the results in a useful and understandable manner. This hinders their ability to evaluate data variations and trends, their decision making process, and their ability to create contingency plans regarding environmental changes.
Methodology

Develop a Web-based integrated environment (Geoportal) with a friendly user interface that will facilitate the access, display, and use of geo-referenced images and data.

The Geoportal will be developed to manage and provide visual representations of environmental data such as: temperature, water quality, and barometric pressure. The main objective is to provide researchers a tool to manage the data and allow them to conduct analysis and evaluations.
Application Tools

Integrated development environment (IDE), for visually designing, constructing, testing, and deploying Java 2 Enterprise Edition (J2EE) applications.

Cross-platform development and deployment.

Accessing MySQL Database

Technique used for creating interactive web applications.

Used for client-side web development.
The proposed Geoportal is a web-based application designed to manage, analyze, and manipulate spatial and temporal geo-referenced data.

http://www.ece.uprm.edu/~s060505/Demo/demo.jsp