

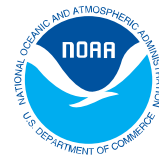
Geoportal : Geographic Data Visualization

By: Viky Arnedo, MS Student

Advisor:
Prof. José A. Borges

WALS AIP

Human Computer Interfaces Group (HCIG)
University of Puerto Rico at Mayaguez (UPRM)
May 2007



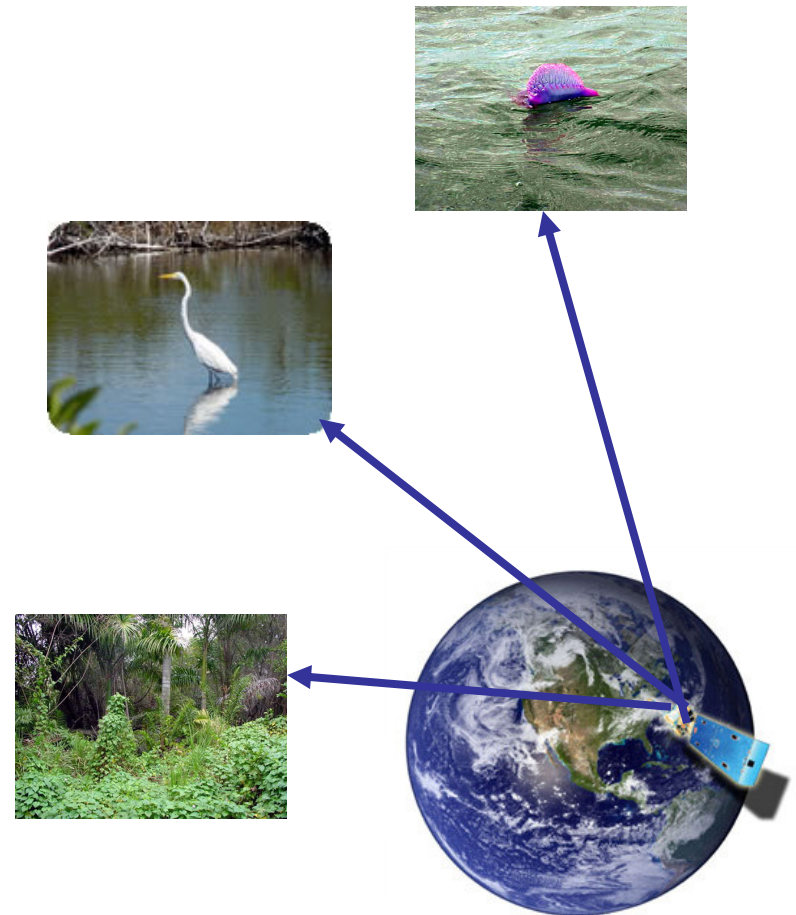
Problem Formulation

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.

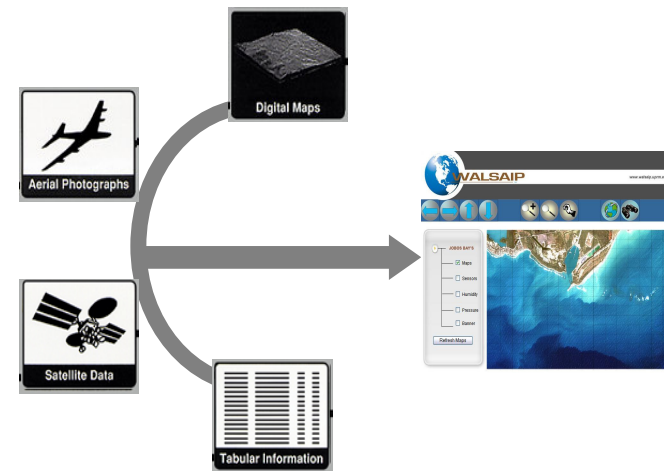
Environmental researchers need multiple software applications to analyze environmental data and to represent the results in a useful and understandable manner. This hinders their ability to evaluate data variations and trends, their decision making process, and their ability to create contingency plans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



Research Results

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>