

## The PRAXIS Prototype, a Browser/Java Applet Client- Server System

Mohammad Alshayeb,  
Research Assistant and  
Ph.D. Candidate in Computer Science  
University of Alabama in Huntsville.  
malshaye@cs.uah.edu

## PRAXIS

- Introduction
- PARXIS Requirements
- PRAXIS Design
- Remote Database Access
- Experience Gained
- Future Work

## Introduction

- What is PRAXIS
  - Local web site <http://weli10>
  - Remote web site <http://puffin.cs.uah.edu>
- Why PRAXIS
  - Component information
  - Contributor information
  - Data content information
  - Not organized and used in a cohesive manner

## PRAXIS Requirements

- Browsing Component Information
  - Name, code, type, manager,...
- Browsing Contributor Information
  - Name, code, web site
- Browsing Data Content
  - Category

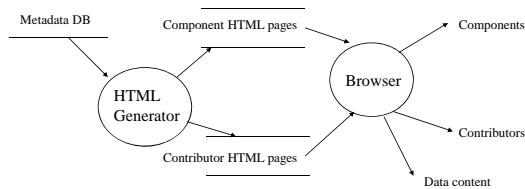
## PRAXIS Requirements

- Web-Based Client-Sever System
- Centralized Component Management
- Allows Browsing of the Information From Anywhere Inside Acxiom Domain

## PRAXIS Design

- JAVA-Based Architecture
- Third-Party DBMS and Drivers for Remote DB Access Across the Internet
  - dbAnywhere from Symantec
- Combination of HTML Pages and Java Applets
  - HTML: better graphics capability
  - JAVA applet: data processing flexibility

## PRAXIS Design



## Remote Database Access

- ODBC-JDBC Driver Without Using Third-Party Software Package
  - Pure JAVA solution: failure
- Third-Party Database Product
  - Some also require client installation
- dbAnywhere
  - No client installation

## Experience Gained

- Direct Multiple Inheritance in Java
  - Interface solution
- Remote Database Access
  - dbAnywhere, Symantec's middleware database server
- Remote DB Access Requires a Dedicated TCP/IP Port
  - Firewall

## Experience Gained

- Browsers Compatibility.
  - Netscape and Explorer
- Classes Communication
  - Through HTML.

## Experience Gained

- Your Own Learning Experience
- Climbing the Learning Curve
- Do's and Dont's

## Future work

- Using Servlet
  - No dedicated TCP/IP port
- Java Beans
  - Component-based software