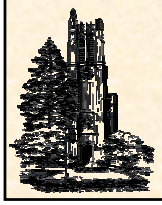
MICHIGAN STATE UNIVERSITY

6. Team Project Architectures

September 20, 2004



CSE 498, Collaborative Design

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Fall 2004

Architecture Components

Team 1: Boeing

- Platforms
  - Windows XP Professional
  - Visual Studio.NET 2003
- Software / Technologies
  - C++
  - OpenGL
  - Microsoft Access

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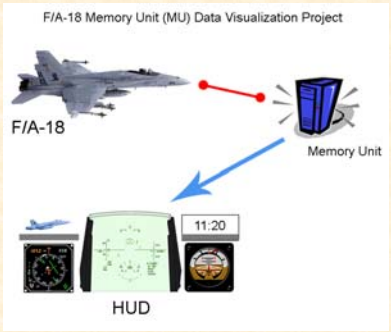
Architecture Illustrated

Team 1: Boeing



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Architecture Risks

Team 1: Boeing

- Will it collaborate the interface with other applications?
- Does it run under minimal system requirements?

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Architecture Components

Team 2: DaimlerChrysler 1

- Platforms
  - Windows Server 2003
  - OS: XP
  - MySQL Sequel Server
  - WebTech wireless device (WT4000)
- Software / Technologies
  - C#
  - ASP.NET
  - GSM/GPRS wireless connection through T-Mobile

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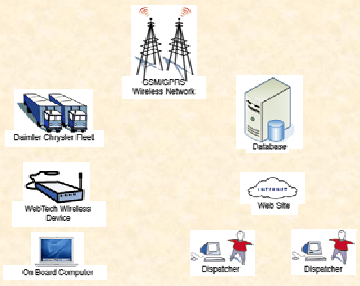
Architecture Illustrated

Team 2: DaimlerChrysler 1



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Architecture Risks

Team 2: DaimlerChrysler 1

- Downtime/Coverage/Signal of T-Mobile (this problem already a risk with current satellite use)
- Specifications of WebTech device work correctly as stated by manufacturer (i.e. durability, hardware access, internet capabilities)
- Hardware durability
- Quick data transfer essential

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Architecture Components

Team 3: DCX: Sales & Marketing

- Platforms
  - Development Machine: Windows XP
  - Application Server: Apache Tomcat 5.0.28
  - Web Server: Microsoft IIS
- Software / Technologies
  - Java Application Development:
    - RIM JDE: development of the client BB application which runs on the BB device. (Proprietary BB software)
      - The JDE comes with it's own API which extends the base J2ME API
    - Eclipse: development of the Server application
  - BlackBerry Wireless Handheld Device (Model #7280)

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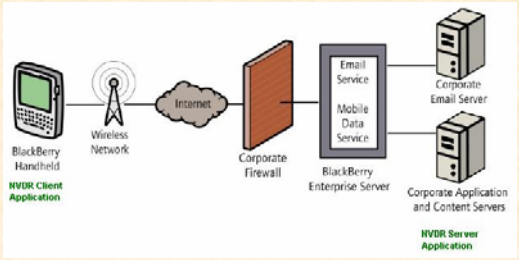
Architecture Illustrated

Team 3: DCX: Sales & Marketing



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Architecture Risks

Team 3: DCX: Sales & Marketing

- Getting sales data from DCX in a form in which we can use to test our application
- No previous experience with this technology
  - Connection between client application and the server application (HttpConnection Protocol)
  - Java (micro) development - formatting data on the blackberry device

0-10

Architecture Components

Team 4: Image Space

- Platforms
  - Windows Server 2003
  - Windows XP
- Software / Technologies
  - C++
  - Visual Studio 6
  - DirectX
  - Image Space Inc. software

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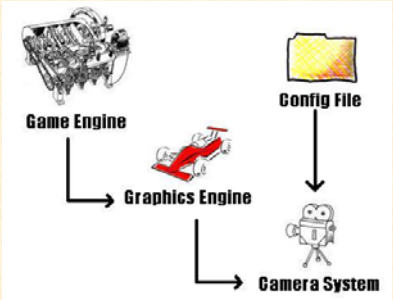
Architecture Illustrated

Team 4: Image Space



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Architecture Risks

Team 4: Image Space

- Must have same capabilities as current system
- Easily customized
- Well documented
- Scalable design

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Architecture Components

Team 5: Matrix

- Platforms
  - Windows Server 2003
  - Red Hat 9 Workstation
- Software / Technologies
  - XML
  - Cocoon
  - Exist
  - XSL
  - Java
  - Xpath, Xquery
  - XHTML, CSS...

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Architecture Illustrated

Team 5: Matrix

Pipeline diagram for Architecture of Matrix Project

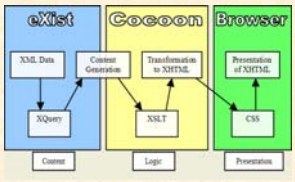

Image created byBrandon Furtwangler at MATRIX

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Architecture Risks

Team 5: Matrix

- Poorly designed XML database/standard would lead to BADNESS!
- Lack of understanding of the transition between stages will inevitably lead to kinks in the process.
- Lack of motivation would lead to WORSENESS.

0-16

Architecture Components

Team 6: MSU Basketball

- Platforms
  - Windows Server 2003
  - Windows XP Tablet Edition (Tablet PCs)
  - SQL Server 2000
  - Possibly Notebooks running Win XP as well
- Software / Technologies
  - .NET, C#
  - 802.11x
  - TCP/IP

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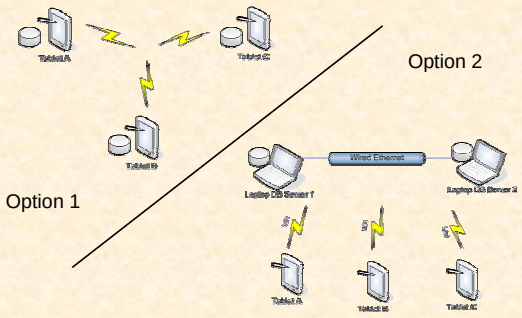
Architecture Illustrated

Team 6: MSU Basketball



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Architecture Risks

Team 6: MSU Basketball

- Database server crashes/fails
  - Need to switch to the backup server automatically
  - Need to recover gracefully if/when brought back online
    - Synchronize the databases with each other
- One or more Tablets crashes/fails
  - Other users should be able to take over for the failed Tablet to continue taking stats
  - Need to recover gracefully if/when Tablet is brought back online
    - Play “catch-up” with the data

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Architecture Components

Team 7 : Motorola

- Platforms
  - Linux Server
  - Windows XP Development
- Software / Technologies
  - Java/Java RMI/Ant Compiler
  - XML
  - Berkeley Database
  - Eclipse Integrated Development Environment
  - VISCA protocol

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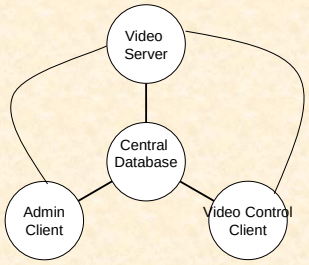
Architecture Illustrated

Team 7 : Motorola



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Architecture Risks

Team 7 : Motorola

- Canon Camera does not work with the extended VISCA protocol
- Video Server could not store live video files into the database or load live video files from database
- Both Cameras do not work

0-22