ITS Graphical Report Maker Project

Phase Gate Presentation:
Analyze

12 February 2003
Department of Software Engineering
Team JACT

Agenda

- Project Description and Scope
- Milestones of Phase
- Budget and Resources Required
- Updated Schedule
- Pending Issues
- Requirements Elicitation Methodology
- Questions
Project Description

• Develop a tool set which will allow users to create reports containing self-selected or canned data elements and presenting them in a manner the user sees fit.

• Reports will be displayed on a web browser in standard graphical forms.

Scope of the Project

• To provide a new medium to generate graphical reports for upper management review and technical analysis.

• To provide the ITS staff the ability to generate graphical reports using the data from the provided database.

• To allow around-the-clock, online access to all reports that have been prepared in advance and executed on-the-fly.
User Scenario

• ITS Staff logs into GRM System.
• User creates and saves a query to the database using the Graphical Query Builder.
• User creates a Graph and saves the report to be executed.
• Script running on another system tells the GRM System to create an updated graph every 5 minutes.
• GRM System places JPG image of Graph on web server for viewing by the public.

Milestones of Phase Analyze

• Three Document Deliverables:
  – Software Requirements Specifications
  – Acceptance Test Plan
  – Operational Testing Scenario
Outcomes: SRS

• Software Requirements Specification
  – Detailed Requirement Listing
    • Agreement between ITS and the Development Team.
  – Formal Definition of Report Construction using a Context-Free Grammar
  – Use Cases
  – GUI Prototypes
  – State Diagrams

Outcomes: ATP

• Acceptance Test Plan
  – Developed in unison with Requirements to ensure sufficient coverage of different permutations of problems that may arise within the software.
  – “Test Conditions” outline possible problems that may occur for each Use Case.
Outcomes: OTS

• Operational Testing Scenario
  – A Testing Script, typically used by a QA Lab Tester, that follows the Test Conditions outlined by the Acceptance Test Plan.
  – Provides actual data and possible outcomes.
  – Provides a Pass/Fail Value for GRM Testing.

Budget and Resources Required

• Budget—$65US for R-Chart Software Package

• Resources—Customer Support Staff
  – Assistance with Server Setup
  – LDAP Authentication
  – Architecture and Design Constraint Discussion
Pending Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date of Resolution</th>
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</thead>
<tbody>
<tr>
<td>End-Of-Quarter Senior Project</td>
<td>19 February 2004</td>
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<tr>
<td>Meeting with ITS Support Staff</td>
<td>23 February 2004</td>
</tr>
<tr>
<td>Purchase of R-Chart Software</td>
<td>25 February 2004</td>
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Scheduling Changes

- Schedule pushed back approximately 1.5 weeks due to increased time Eliciting Requirements.
- End result of Schedule Change: Higher quality SRS and Test Plans.
- Future Phase Gate dates adjusted accordingly, but Deploy Phase still finished before drop-dead date at end of quarter.
Updated Schedule

<table>
<thead>
<tr>
<th>Phase Gate</th>
<th>Original Date</th>
<th>Updated Date</th>
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<tbody>
<tr>
<td>Analyze</td>
<td>January 30th</td>
<td>February 12th</td>
</tr>
<tr>
<td>Design</td>
<td>February 25th</td>
<td>March 12th</td>
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<td>Develop</td>
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<tr>
<td>Deploy</td>
<td>May 7th</td>
<td>May 21st</td>
</tr>
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Elicitation Methodology

- Customer Interviews
  - Weekly meetings with Mark
  - Email correspondence
- Use Cases
- State Diagram
- GUI Prototypes
- Formal Model of Grammar
Requirements Management

• Demonstrate Borland Caliber RM Tool

Team Website

• You may track the project status at:
  – http://www.se.rit.edu/~jact

• Questions?