Welcome

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Team Members

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Acceptance Test
by
DIGITAL EVOLUTIONS

April 27th, 2010
Agenda

- Introduction / Problem Overview
- Our Waterfall Model
- Functional Requirements
- Testing Overview
- Security
- Future Enhancements
- PhpDocumentor
- PHPUnit
- Demonstration
- Deliverables
- Timeline
- What’s Next
Agenda

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Problem Overview

- Connect members of Siena community
- Group oriented
- Promote 6 Learning Goals

<table>
<thead>
<tr>
<th>Reason</th>
<th>Rhetoric</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regard</td>
<td>Reverence</td>
<td>Responsibility</td>
</tr>
</tbody>
</table>

- User and Group Pages
Agenda

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See on Digital Evolutions team website
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Detail what the system will be able to do
  ◦ Specific behaviors/functions
• Testable features of the system
• Requirements organized by user

See Section 2.1 in Acceptance Test Document
See Section 1.3 in Appendix B: Test Results and PHPUnit Document
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Testing Overview

- Determined by functional requirements
- Test Cases:
  - A set of conditions or variables to be tested
- Unit Tests:
  - Accumulation of test cases for a certain feature
- Integration Tests:
  - Tests that units interact correctly

See Section 2.1 in Acceptance Test Document
● Full System test
  o Testing of complete, integrated system

● Acceptance test
  o Does the final product satisfy the client’s needs?

● Results presented in Acceptance Test Document
## Unit Test – Forgot Password

<table>
<thead>
<tr>
<th>Pass/Fail Status</th>
<th>Test Number</th>
<th>Description</th>
<th>Action to perform test (input)</th>
<th>State Before Test</th>
<th>Expected result</th>
<th>Observed result</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>3.001</td>
<td>Enter E-mail Address text box is blank</td>
<td>None</td>
<td>Blank text box</td>
<td>&quot;E-mail address required&quot; message displayed and Submit button is disabled</td>
<td>Change Password button enabled but brings up error message when clicked because fields are not filled out</td>
<td>JR</td>
</tr>
<tr>
<td>P</td>
<td>3.002</td>
<td>Enabled Submit button</td>
<td>User inputs an E-mail address into the Enter E-mail text box</td>
<td>Disabled Submit button</td>
<td>Submit button is enabled</td>
<td>Button was already enabled but no error message now</td>
<td>JR</td>
</tr>
<tr>
<td>F</td>
<td>3.003</td>
<td>Wrong E-mail address</td>
<td>User inputs an E-mail address that is not in the database and clicks the enabled Submit button</td>
<td>Blank text box</td>
<td>Wrong E-mail address message displayed to user</td>
<td>Check email message displayed</td>
<td>JR</td>
</tr>
<tr>
<td>P</td>
<td>3.004</td>
<td>Confirmation page for confirmation E-mail being sent</td>
<td>User inputs an E-mail address that is in the database and clicks the enabled Submit button</td>
<td>Blank text box</td>
<td>User is brought to a confirmation page saying that the E-mail was sent and the E-mail was actually sent to the user's E-mail address</td>
<td>User is brought to a confirmation page saying that the E-mail was sent and the E-mail was actually sent to the user's E-mail address</td>
<td>JR</td>
</tr>
<tr>
<td>P</td>
<td>3.005</td>
<td>Confirmation E-mail has proper link</td>
<td>Click link in E-mail</td>
<td>E-mail with link</td>
<td>Link brings user to the Reset Password page</td>
<td>Link brings user to reset password screen</td>
<td>JR</td>
</tr>
</tbody>
</table>

**Unit Summary**

- 13 tests
- 12 passed
- 1 failed

Date of last test = 4/21/10

See Appendix B: Test Results and PHPUnit Document
## Unit Test Catalog

<table>
<thead>
<tr>
<th>Pass/Fail Status</th>
<th>Unit Number</th>
<th>Unit Test Name</th>
<th>Date Last Tested</th>
<th>Comments or brief description</th>
<th>Integrated with these units</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1</td>
<td>Registration</td>
<td>4/21/2010</td>
<td></td>
<td>2, 3</td>
</tr>
<tr>
<td>P</td>
<td>2</td>
<td>Login</td>
<td>4/21/2010</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>Forgot Password</td>
<td>4/21/2010</td>
<td></td>
<td>2, 3</td>
</tr>
<tr>
<td>P</td>
<td>4</td>
<td>Guest View - User Home Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>5</td>
<td>Guest View - User Profile Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>6</td>
<td>Guest View - User Groups Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>7</td>
<td>Guest View - User Friends Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>Guest View - Group Home Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>9</td>
<td>Guest View - Group Profile Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>Guest View - Group Members Tab</td>
<td>4/21/2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>44</td>
<td>Admin - Browse</td>
<td>4/22/2010</td>
<td></td>
<td>28, 29, 30, 31, 32, 33, 34, 35, 36, 37</td>
</tr>
<tr>
<td>P</td>
<td>45</td>
<td>Super Admin</td>
<td>4/22/2010</td>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

**87.83% of Test Cases Passed (99.44% passes the Ivory Snow Test)**

See section Appendix B: Test Results and PHPUnit Document
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SQL Injection - Prepared/Parameterized Statements

```php
function run_baller_query($q, $arr)
{
    $mysqli = new mysqli("localhost", "username", "password", "database_name");
    if (mysqli_connect_errno()) {
        printf("Connect failed: %s\n", mysqli_connect_error());
        exit();
    }
    $stmt = $mysqli->prepare($q);
    call_user_func_array(array($stmt, "bind_param"), $arr);
    $stmt->execute();
    if ($meta = $stmt->result_metadata())
    {
        while($field = $meta->fetch_field())
        {
            $params[] = &$row[$field->name];
        }
        call_user_func_array(array($stmt, "bind_result"), $params);
    }
    $stmt->fetch();
    $stmt->close();
    $mysqli->close();
    return $row;
}
```

See section Appendix D: Source Code and PhpDocumentor Document
Security

- Prepared Statements Implemented

```php
$q = "SELECT ID, password, usertype FROM user WHERE username = ?";
$params = array();
$params[0] = 's';
$params[1] = $id;
$row = run_baller_query($q, $params);
```

See section Appendix D: Source Code and PhpDocumentor Document
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Future Enhancements

- More Security Enhancements
  - XSS (Cross Site Scripting)
  - Session Hijacking
- More value to the 6 R’s
- Privacy Settings
- Disabling Content

See section 2.4 in the Acceptance Test Document
Agenda

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- **PhpDocumentor**
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See section Appendix D: Source Code and PhpDocumentor Document

```php
/**
 * Group class to handle the group functionality, inherits from the Page Class
 * @author Alan Distasio
 * @copyright Digital Evolutions (c), 2010
 * @version 1.0
 * @package group
 */
require_once("page.php");
require_once("home_tab.php");

class Group extends PageSuperClass
{
    /**
     * User's username
     * @var string
     */
    var $uname;

    /**
     * Function to get the user's and group's info
     * @param string
     */
    function __construct($id){
        $this->uname = $id;
    }
}
See section Appendix D: Source Code and PhpDocumentor Document

**Class Overview** [line 23]

**PageSuperClass**

   |--Group

Page Super class and functions to handle all the common functions between users and groups

**Author(s):**

- Alan Distasio

**Version:**

- 1.0

**Copyright:**

- Digital Evolutions (c), 2010

**Variables**

- $uname

**Constants**

**Methods**

- __construct
- create_label
- create_members
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See section Appendix B: Test Results and PHPUnit Document
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Demonstration

- Alan Logs into SaintBook
  - Creates a group
    - Uploads an image/caption
  - Sends Friend Request to Chris
Chris Logs into SaintBook
  - Accepts Alan’s Friend Request
  - Requests Membership to Alan’s Group
Alan Logs into SaintBook
  - Accepts Chris into the Group
Dr. Breimer Logs into SaintBook
  Label’s Alan’s Group with an “R”
Deliverables

- SaintBook on client’s HostMonster account
- DVD including:
  - Acceptance Test Document, Appendices and PPT
  - Full copy of files from team directory on ‘Oraserv’
  - SaintBook source code
  - README.txt file
  - Team Song lyrics

See Section 4.2 in Acceptance Test Document
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Timeline - Gantt Chart

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Jan 17, '10</th>
<th>Feb 7, '10</th>
<th>Feb 28, '10</th>
<th>Mar 21, '10</th>
<th>Apr 11, '10</th>
<th>May 2, '10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team Meetings (Weekly)</td>
<td>31</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>32</td>
<td>Client Meetings (Weekly)</td>
<td>25</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>47</td>
<td>Detailed Design</td>
<td>31</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>48</td>
<td>Detailed Design Document Due</td>
<td>25</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>49</td>
<td>Detailed Design Presentation</td>
<td>31</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>50</td>
<td>Acceptance Test</td>
<td>25</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>51</td>
<td>Acceptance Test Document Due</td>
<td>25</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>52</td>
<td>Acceptance Test Presentation</td>
<td>25</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>53</td>
<td>Academic Celebration</td>
<td>31</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>54</td>
<td>End of the year party</td>
<td>31</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Team: Digital Evolutions
Project: Saintbook
Date: 4/27/2010

See page 43 in the Acceptance Test Document
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What’s Next

**Academic Celebration**

**When**: April 30th

**End of the year party**

**When**: May 3rd
Thank You

Questions?