Detailed Design

Appendix B: Data-Flow Diagrams

SaintBook

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March 8, 2010
# SaintBook

## Detailed Design

### Appendix B: Data Flow Diagrams

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Flow Diagrams</td>
<td>4</td>
</tr>
<tr>
<td>1. Data Flow Diagram Legend</td>
<td>5</td>
</tr>
<tr>
<td>2. Context Diagram</td>
<td>6</td>
</tr>
<tr>
<td>3. Level 0 Diagram</td>
<td>7</td>
</tr>
<tr>
<td>4. Level 1 Diagram: Authenticate</td>
<td>8</td>
</tr>
<tr>
<td>5. Level 1 Diagram: Label Attributes</td>
<td>9</td>
</tr>
<tr>
<td>6. Level 1 Diagram: Register</td>
<td>10</td>
</tr>
<tr>
<td>7. Level 1 Diagram: Grant Admin Access</td>
<td>11</td>
</tr>
<tr>
<td>8. Level 1 Diagram: Handle User/Group Page</td>
<td>12</td>
</tr>
<tr>
<td>7.1 Level 2 Diagram: View User Page</td>
<td>13</td>
</tr>
<tr>
<td>7.1.1 Level 3 Diagram: Navigate to User Page</td>
<td>14</td>
</tr>
<tr>
<td>7.1.1.1 Level 4 Diagram: View User Tabs</td>
<td>15</td>
</tr>
<tr>
<td>7.2 Level 2 Diagram: View Group Page</td>
<td>16</td>
</tr>
<tr>
<td>7.2.1 Level 3 Diagram: Navigate to Group Page</td>
<td>17</td>
</tr>
<tr>
<td>7.2.1.1 Level 4 Diagram: View Group Tabs</td>
<td>18</td>
</tr>
<tr>
<td>7.3 Level 2 Diagram: Manage User Page</td>
<td>19</td>
</tr>
<tr>
<td>7.3.1 Level 3 Diagram: Edit Home Tab</td>
<td>20</td>
</tr>
<tr>
<td>7.3.2 Level 3 Diagram: Edit Profile Tab</td>
<td>21</td>
</tr>
<tr>
<td>7.3.2.1 Level 4 Diagram: Edit User Profile Content</td>
<td>22</td>
</tr>
<tr>
<td>7.3.3 Level 3 Diagram: Edit Friends Tab</td>
<td>23</td>
</tr>
<tr>
<td>7.3.4 Level 3 Diagram: Edit Groups Tab</td>
<td>24</td>
</tr>
<tr>
<td>7.3.5 Level 3 Diagram: View Message Center Tab</td>
<td>25</td>
</tr>
<tr>
<td>7.3.6 Level 3 Diagram: Delete User Content</td>
<td>26</td>
</tr>
<tr>
<td>7.4 Level 2 Diagram: Manage Group Page</td>
<td>27</td>
</tr>
<tr>
<td>7.4.1 Level 3 Diagram: Edit Group Home Tab</td>
<td>28</td>
</tr>
<tr>
<td>7.4.2 Level 3 Diagram: Edit Group Profile Tab</td>
<td>29</td>
</tr>
<tr>
<td>7.4.2.1 Level 4 Diagram: Edit Group Profile Content</td>
<td>30</td>
</tr>
<tr>
<td>7.4.3 Level 3 Diagram: Edit Group Members Tab</td>
<td>31</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>7.4.4</td>
<td>Level 3 Diagram: Edit Group Friends Tab</td>
</tr>
<tr>
<td>7.4.5</td>
<td>Level 3 Diagram: View Message Center Tab</td>
</tr>
<tr>
<td>7.4.6</td>
<td>Level 3 Diagram: Create/Delete Group Page</td>
</tr>
<tr>
<td>7.5</td>
<td>Level 2 Diagram: Browse for Users/Groups</td>
</tr>
</tbody>
</table>
Data Flow Diagrams

The purpose of Data Flow Diagrams is to show the “flow” and transformation of data through the system. These diagrams are used as a visualization tool to help the audience get a better idea of what exactly is going on in the system. The first image shown below will be a legend describing what each of the different items in the diagrams are and what they represent. A Context Diagram is shown next, which is the general overview of each of the different agents interacting with the system. The Level 0 Diagram shows some more details about which processes each of the agents will be interacting with. Arrows are drawn to show the flow of data between the agents and processes. Following the Level 0 Diagram are Level 1, Level 2, Level 3 and Level 4 Diagrams. These Diagrams further break down each of the processes that are involved with the system, each showing more detail the further down the level is.
1. Data Flow Diagram Legend

**Entities/Sources/Sinks** of the system which represents the users. Data will flow from and to these entities.

**Processes** of the system which represents the functions. Data will flow from and to these processes.

**Stores** of the system which represent what stores the data. Data will flow into, be saved and be pulled from these data stores.

**The Flows** of the system which represent the chunk or packets of information going from one component to another.

The above image displays a legend for the Data Flow Diagrams. This legend explains all objects used in the diagram and what they represent.
Context Diagram

This diagram depicts a broad representation of the entities of the system and their interaction with the system.
3 Level 0 Diagram

This diagram depicts a detailed interaction or data flow between the entities and the processes of the system.

A.) Login request
B.) Use profile and group functions
C.) Sign up request
D.) Process login request
E.) Process profile and group functions
F.) Process sign up request
G.) Insert label
H.) Label response
I.) Give access
J.) Receive access
K.) Give access response
Level 1 Diagram: Authenticate

This diagram depicts a more detailed representation of the Authenticate process of the system.
This diagram depicts a more detailed representation of the Label Attribute process of the system.
Level 1 Diagram: Register

This diagram depicts a more detailed representation of the Register process of the system.
Level 1 Diagram: Grant Admin Access

This diagram depicts a more detailed representation of the Grant Admin process of the system.
Level 1 Diagram: Handle User/Group Page

This diagram depicts a more detailed representation of the Handle User/Group Page process of the system.
7.1 Level 2 Diagram: View User Page

This diagram depicts more detailed representation of the Handle User/Group Page process of the system. View User Page is when a user sees another user's page.
7.1.1 Level 3 Diagram: Navigate to User Page

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Navigate to User Page is when a user navigates to another user’s page.
7.1.1.1 Level 4 Diagram: View User Tabs

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. View User Tabs is when a user clicks on that user's tabs.
7.2 Level 2 Diagram: View Group Page

This diagram depicts more detailed representation of the Handle User/Group Page process of the system. View Group Page is when a user sees group's page.
7.2.1 Level 3 Diagram: Navigate to Group Page

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Navigate to Group Page is when a user navigates to a group's page.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. View Group Tabs is when a user clicks on that group's tabs.
7.3  Level 2 Diagram: Manage User Page

This diagram depicts more detailed representation of the Handle User/Group Page process of the system. Manage User Page is when a user manages their page.
7.3.1 Level 3 Diagram: Edit Home Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Home Tab is when a user manages their Home tab.
7.3.2 Level 3 Diagram: Edit Profile Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Profile Tab is when a user manages their Profile tab.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit User Profile Content is when a user edits their Profile tab content.
7.3.3 Level 3 Diagram: Edit Friends Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Friends Tab is when a user manages their Friends tab.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Groups Tab is when a user manages their Groups tab.
7.3.5  Level 3 Diagram: View Message Center Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. View Message Center Tab is when a user manages their Message Center Tab.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Delete User Page is when a user can deactivate their account.
7.4 Level 2 Diagram: Manage Group Page

This diagram depicts more detailed representation of the Handle User/Group Page process of the system. Manage Group Page is when a user manages a group that they are a member of.
7.4.1 Level 3 Diagram: Edit Group Home Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Group Home Tab is when a user manages their Group’s Home Tab.
7.4.2  Level 3 Diagram: Edit Group Profile Tab

SaintBook

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Group Profile Tab is when a user manages their Group’s Profile Tab.
7.4.2.1  Level 4 Diagram: Edit Group Profile Content

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Group Profile Content is when a user edits their Group Profile Tab content.
7.4.3 Level 3 Diagram: Edit Group Members Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Group Members Profile Tab is when a user manages their Group’s Members Tab.
7.4.4 Level 3 Diagram: Edit Group Friends Tab

This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Edit Group Friends Tab is when a user manages their Group's Friends Tab.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. View Message Center Tab is when a moderator manages their Group’s Message Center Tab.
This diagram depicts an even more detailed representation of the Handle User/Group Page process of the system. Create/Delete Group Page is when a moderator can create/delete a group, delete content and pass moderation status for the group they moderate.
This diagram depicts more detailed representation of the Handle User/Group Page process of the system. Browse for Users/Groups is when a user browses SaintBook for Users and Groups.