ACUMEN
DEVELOPERS

Software Engineering
Software Requirements Specification (SRS) Document

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www.radford.edu/softeng18
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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
3.0.0	Chloe Norris Brad Davis Josh Hodges Dan Overton	Final	03/24/10

Review & Approval

Requirements Document Approval History

Approving Party	Version Approved	Signature	Date
Dan Overton			
Dr. T. L. Lewis			

Requirements Document Review History

Reviewer	Version Reviewed	Signature	Date
Chloe Norris			
Josh Hodges			
Brad Davis			

Contents

1. Introduction

1.1 Purpose of this document

The purpose of this document is to provide a reference and overview of the requirements for a website and social presence for the Intellectual Disabilities Agency of the New River Valley.

1.2 Scope of this document.

The requirement elicitation consisted of Joshua Hodges, Chloe Norris, Brad Davis, and Dan Overton. These members were responsible for obtaining and presenting the requirement information that exists in this document and outlined by Dr Lewis of Radford University, Ms. Roop, and Ms. Greenberg both of the Intellectual Disabilities Agency of the New River Valley.

Time was the largest constraint on this document as the elicitation team assigned the date of 3/24/10 as the completion date.

1.3 Overview

Upon completion the project will be a synergized internet social presence (Facebook, Twitter) with a MissionFish account and PayPal donation. A homepage will function as a centralized location where information from external social media and internal information will be displayed. The website will make use of a Wordpress content management system to provide a high level way for administrators to easily change information displayed on the homepage. Links to an external donation page and events will be highlighted.

Any updates to the Facebook page will automatically be posted to the twitter page to reduce the number of updates that will have to be manually updated.

1.4 Business Context

The Intellectual Disabilities Agency of the New River Valley is a local nonprofit organization that serves and caters to the needs of special needs children. They offer a variety of fun and engaging programs, many of which are held in collaboration with the local Special Olympics chapter.

2. General Description

2.1 Product Functions

The homepage will function as a manageable web and social networking presence for the Intellectual Disabilities Agency of the new river valley.

2.2 Similar System Information

The final product will be very similar to most existing commercial/business websites. It is similar in the aspect that the updated homepage will have information about the organization, events, and other information concerning the IDA. The two main goals of the final product are to raise money, and to have a distinguished networking presence. The current website is not fully functional, and may not attain the most desired graphical appearance. Our system will benefit the organization in regards to making the webpage fully functional, achieving a more attractive interface, and interlinking their web presence via Facebook, Twitter, and Mission Fish on the home page.

2.3 User Characteristics
The users of the web presence will mainly be the website administrators, whom are determined by the IDA. Individuals who are seeking information about what the IDA entails will also be interacting with the website, Facebook, Twitter, and MissionFish.

2.4 User Problem Statement
The Intellectual Disability Agency of the new river valley wanted to update their web presence to become more in tune with modern standards as well as a platform in which to build their social marketing efforts by the creation of a twitter, facebook, and missionfish account.

2.5 User Objectives
The User objective is to have a completely functional website that displays organizational info, events, updates, contact information, internal forms, and provides access into ways to provide the IDA with a source of sustained income. The primary objective of this website was to from a foundation in which the IDA could build a successful social networking presence in order to get the word out of current events, and build relationships with their current supporters/followers. The secondary objective was to create a way to make an income from web based donations such as PayPal or missionfish.

The IDA also expressed a future need for a program to serve as a intermediary for event information collected from their website and their already existing SQL database for items auctioned off at said events. Acumen will be preparing HTML templates, icons, and graphics to insure that any new additions the IDA will be able to have the same graphic identity as their web prescence.

2.6 General Constraints
The largest constraints placed on this project is time and format. Acumen developers were given less than 5 months to complete this project in its entirety. Because of this constraint we opted to use a CMS however the CMS uses its own formatting rules and layout schemes.

3. Functional Requirements

1. **The website shall prevent any non administrator from editing the website through password protection.**
    1. **Description**
        Before being allowed access into the administration portal of the CMS a user must first provide a valid user name and password.

2. **Criticality**
   5
3. **Technical issues**
   The login accounts are created in a SQL database that must be creates separately. Input: username and password.
4. **Risks**
   User accounts can be compromised by lost or misplaced passwords that could inherently lead to misinformation. Accounts can be given a new password or deactivated through the SQL administration.
5. **Dependencies with other requirements**
   none

2. **Administrators shall be able to create an article for the website from the CMS.**
   1. **Description**
      The CMS provides different ways to post a new article to the website.
   2. **Criticality**
      5
   3. **Technical issues**
      The entire article posting is handled by the Wordpress CMS. Users input text in specified text box that includes options for titles and pictures.
   4. **Risks**
      Because the CMS handles all article creation, in the unlikely event the CMS is corrupted the administrators will lose the ability to post new articles.
   5. **Dependencies with other requirements**
      1

3. **Administrators shall be able to modify an article by using the CMS.**
   1. **Description**
      Administrators have the ability to modify or edit an existing article to change or fix information presented.
   2. **Criticality**
      5
   3. **Technical issues**
      Users have the option of retrieving previously inputted text and modifying it via the Wordpress CMS.
   4. **Risks**
      A failure within the CMS will prevent the user from editing as the articles are kept server side.
   5. **Dependencies with other requirements**
      1,2

4. **Administrators shall be able to remove an article by using the CMS.**
   1. **Description**
      Administrator users can use the CMS to completely delete an existing article.
   2. **Criticality**
      5.
   3. **Technical issues**
      The CMS displays an option to delete any given article.
   4. **Risks**
      The deletion is permanent and un-recoverable, in the event that an important article is deleted the user will have to create a new one manually.

5. **Dependencies with other requirements**
   1,2

5. **The website shall allow individuals to contact the organization by email.**
   1. **Description**
      Contact information is displayed in the navigation bar of the homepage.
   2. **Criticality**
      5
   3. **Technical issues**
      A mailto contact us button is displayed as an image within the navigation bar.
   4. **Risks**
      This contact method only allows for exchange via email instead of more traditional methods.
   5. **Dependencies with other requirements**
      none

6. **The website shall link to internal and external internet nodes.**
   1. **Description**
      The website will display navigation elements to internal pages as well as external social networking sites.
   2. **Criticality**
      5
   3. **Technical issues**
      The website provides a navigational area that directs users to the designated pages.
   4. **Risks**
      In the unlikely event that a link is mistyped a user will be directed to a 404 page.
   5. **Dependencies with other requirements**
      none

7. **The website shall be W3C certified for browsers supporting HTML 4.01 and CSS2**
   1. **Description**
      The website will have verified HTML and CSS static pages.
   2. **Criticality**
      4
   3. **Technical issues**
      W3C handles its certification through document types in the HTML header.
   4. **Risks**
      W3C certifies strictly coded websites which can sometimes lead to longer development times.
   5. **Dependencies with other requirements**
      none

8. **Administrators shall be able to create a new status message within Facebook.**
   1. **Description**
      Administrators will be able to post Facebook status updates.
   2. **Criticality**
      4
   3. **Technical issues**
      After posting, the desired message should be listed in the fan page as well as any other follower's status pages.

4. **Risks**
   Misinformed or malicious status' may be created that could confuse or misinform followers.
5. **Dependencies with other requirements**
   none

9. **Administrators shall be able to appoint new administrators within Facebook.**
   1. **Description**
      Administrators have the ability to appoint other administrators (with a valid Facebook account) to the group via friend list or email.
   2. **Criticality**
      4
   3. **Technical issues**
      The current administrator must first select the new administrator, the receiver will be automatically enrolled as a administrator without notification.
   4. **Risks**
      Any Administrator can invite anyone to become a administrator without approval from a higher authority which could be abused.
   5. **Dependencies with other requirements**
      none.

10. **Administrators shall be able to remove administrators within Facebook.**
   1. **Description**
      Administrators have the ability to remove any of the other administrators.
   2. **Criticality**
      4
   3. **Technical issues**
      To remove an Administrator the user must click "Remove Admin."
   4. **Risks**
      Since any administrator can remove any other administrator or themselves, a user might accidently or maliciously remove one or at worst case all of the administrators.
   5. **Dependencies with other requirements**
      9

11. **Administrators shall be able to add new events in Facebook.**
   1. **Description**
      A IDA administrator can add new events to the Facebook page.
   2. **Criticality**
      4
   3. **Technical issues**
      A user creates the event by clicking "edit" under the events box, filling out the required information, and finishing by clicking "create event." new events will then be displayed on their own page and status updates will be sent out.
   4. **Risks**
      By inputting wrong information a administrator may confuse a follower on a specific event.
   5. **Dependencies with other requirements**
      none

12. **Administrators shall be able to modify events in Facebook.**
   1. **Description**
      An IDA Facebook administrator has the ability to modify existing events.

2. **Criticality**
   4
3. **Technical issues**
   "edit event" option is only displayed under the event page.
4. **Risks**
   Once revisions are made previous versions are unavailable.
5. **Dependencies with other requirements**
   11

13. **Administrators shall be able to invite Facebook account holders to upcoming Facebook events.**
    1. **Description**
       IDA Facebook administrators have the ability to invite friends and followers to upcoming events.
    2. **Criticality**
       4
    3. **Technical issues**
       All users have invite controls, invite options are located only in the event page.
    4. **Risks**
       As with all social gatherings, age and opinions might not be properly observed.
    5. **Dependencies with other requirements**
       11

14. **The website and corresponding social elements shall implement a uniform graphic identity approved by the IDANRV committee.**
    1. **Description**
       The website and the external social media elements (Facebook, Twitter) will observe a similar graphic identity.
    2. **Criticality**
       4
    3. **Technical issues**
       Different occasional and/or seasonal identities may be applied to the social media elements to prevent content stagnation.
    4. **Risks**
       Graphic components may be difficult for some users to interpret(color blindness, etc)
    5. **Dependencies with other requirements**
       none

15. **The CMS shall provide a function to retrieve a forgotten password.**
    1. **Description**
       In the event that a user forgets their password, the CMS will provide a way of accessing it without the need of a server administrator's assistance.
    2. **Criticality**
       4
    3. **Technical issues**
       The user must specify the email address they used to register, requiring a mail function on the host server.
    4. **Risks**
       An intruder may use this feature to maliciously obtain a CMS portal username and password.

5. **Dependencies with other requirements**
   none

16. **The website should implement a monochromatic color scheme featuring turquoise and brown for the neutral.**
    1. **Description**
       The main website will exhibit a turquoise monochromatic color scheme .
    2. **Criticality**
       3
    3. **Technical issues**
       Content must be pre approved by IDANRV committee
    4. **Risks**
       none – unless a user really hates turquoise
    5. **Dependencies with other requirements**
       14

17. **A MissionFish shall be set up to allow donations through eBay transactions.**
    1. **Description**
       A MissionFish account will be set up to allow donations through various eBay sellers.
    2. **Criticality**
       3.
    3. **Technical issues**
       MissionFish notifies the account holder of any changes or addition to a fundraising sell, however this is their only output.
    4. **Risks**
       Loss of business account information such as account holders, bank account, address and phone information.
    5. **Dependencies with other requirements**
       none

18. **The website shall provide a donation button on the home page.**
    1. **Description**
       A donation button will be addressed on the index page of the main website.
    2. **Criticality**
       3
    3. **Technical issues**
       A donation button on the homepage will link directly to Giving Works donation page.
    4. **Risks**
       Account security is handled completely through eBay, however it is possible that a user may lose confidential information, or that the link would be changed to a malicious site.
    5. **Dependencies with other requirements**
       none

19. **A tutorial option shall be made available on the CMS to provide instructions for administrators to manage the web presence.**
    1. **Description**
       A help option will be available in the CMS dashboard for inexperienced users to reference to.
    2. **Criticality**
       2

3. **Technical issues**
   Displayed at top right of CMS portal, not all encompassing.
4. **Risks**
   The CMS help file could be corrupted, rendering help from that source undeliverable.
5. **Dependencies with other requirements**
   none

20. **The facebook status updates shall be simultaneously updated to the twitter page.**
    1. **Description**
       Facebook status changes will automatically display on the Twitter account as a courtesy to the administrator.
    2. **Criticality**
       2
    3. **Technical issues**
       Facebook account must be synced to Twitter. This feature is made available within the Twitter API.
    4. **Risks**
       Mistyped information must be deleted at both sources.
    5. **Dependencies with other requirements**
       none

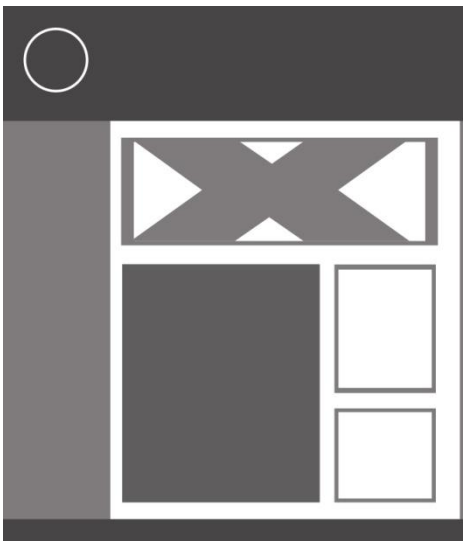
4. Interface Requirements

4.1 User Interfaces

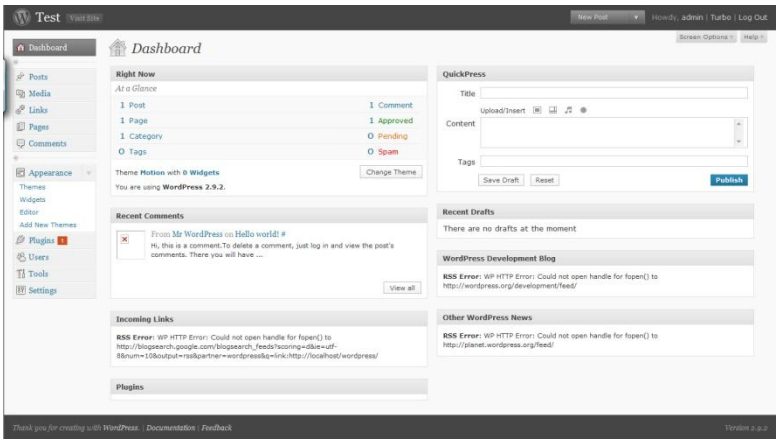
User interaction is largely graphical based using principles from perceptual human and computer interaction. Our project uses audible font, top down processing, and discernable elements.

- **4.1.1 GUI**

  The user will experience different GUI environments depending on what social networking service they are using.

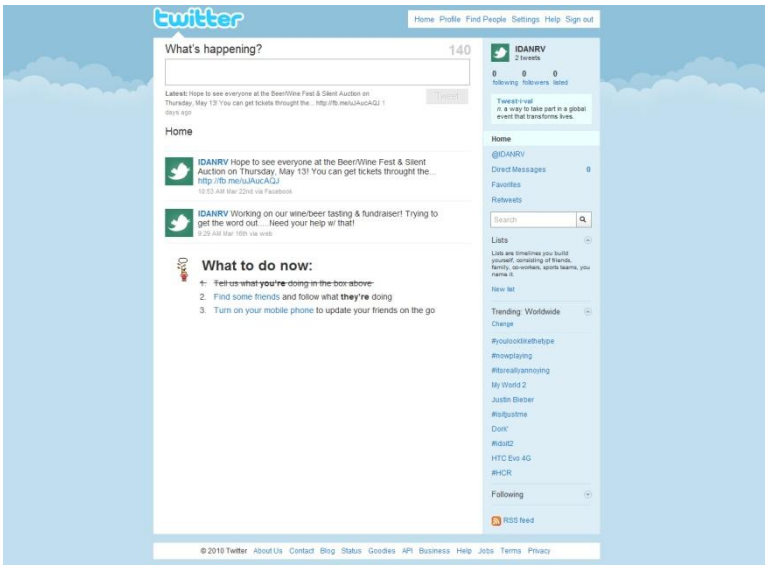


-Website Wireframe
Navigation bar on the right hand side accentuated by a featured topic and content boxes.



-CMS admin page

Provides a quick summary of website elements as well as newly updated items. The majority of site editing tools are located on the left hand side for easy display and review.



-twitter admin page

Uses the majority of the space to display status updates from yourself or from people you are "following." Provides reviewable material on the right and side of the screen and a account specific task bar at the top right.

-facebook admin

Displays group and advertising options in topic specific clusters that take up the majority of the page. Site statistical information such as page fans, are displayed on the right side bar.

- **4.1.2 CLI**
  N/A
- **4.1.3 API**
  N/A
- **4.1.4 Diagnostics or ROM**
  N/A

4.2 Hardware Interfaces

This project is completely software based.

4.3 Communications Interfaces

A basic internet connection is required to view the site.

4.4 Software Interfaces

The IDA website utilizes the following web components:

- Wordpress CMS v2.9.2
- PHP v5.3.2
- PHP myAdmin v3.3.1

5. Performance Requirements

The IDA's web presence will require a computer with an active internet connection to be able to view the website and its corresponding nodes. The computer's web browser must be Internet Explorer 6 or above, Firefox, Chrome, or any current browser able to view a website with W3C certification.

6. Other non-functional attributes

6.1 Security

The main website shall prompt the IDA administrators for a username and password prior to allowing any changes to be made. The username and password shall be unique to each authorized user. Should the authorized user forget their login information, a link to have it emailed shall be provided. The other IDA web presence nodes such as Facebook, Twitter, and MissionFish will also require separate login information and if only available to certain users determined by Sheila Roop.

6.2 Binary Compatibility

The website will be operational with any operating system that can use modern browsers that support HTML 4.01 and partial support of CSS2.

6.3 Reliability

The IDA's main website should remain online as long as the hosting servers are functional. The separate node's (Facebook,Twitter,MissionFish) functionality is also dependent on the different host server's performance.`

6.4 Maintainability

The IDA’s main website’s CMS (Content Management System) should provide the administrators a straight-forward interface to easily update their website. The other components of their web presence should use separate user interfaces implemented by each social networking site.

6.5 Portability

The web presence should be viewed on all computers with an internet connection provided they have a compatible web browser.

6.6 Extensibility

The IDA’s website, Facebook, and Twitter accounts shall allow for updates to list any upcoming events, fundraisers, or news.

6.7 Reusability

The IDA’s home page shall provide an efficient, aesthetically pleasing layout that can be used as a foundation for any upcoming sub pages or a future overhaul of the website.

6.8 Application Affinity/Compatibility

The web presence shall be compatible with all modern web browsers (IE 6+,Chrome, Firefox, Safari, etc.).

6.9 Resource Utilization

Computational requirements vary depending on client specific DBMS and web server application. In general the website is expected to demand minimal system resources though it is recommended to have 10 gigabytes of free space for sufficient storage of the website and all of its components.

6.10 Serviceability

The CMS will provide the IDA administrators an easy-to-use interface with capabilities to maintain their website. This paired with abundant documentation should provide a smooth and error free way to service their web presence.

7. Operational Scenarios

If the admin wishes to edit their web site, this would be a successful scenario:

- The administrator wished to edit their website and logs on the CMS.
- Once correct log in information is entered, they will be directed to the admin portal.
- From here, the administrator has several options for action. The administrator will have the ability to edit information about upcoming events, organizational information, external links, and any other objects on the IDA website.
- Once the administrator updates the web site, all site changes will be submitted through the CMS, and the web site will be updated to the administrators liking in a matter of minutes.

If the user visits the web site, this would be an unsuccessful scenario:

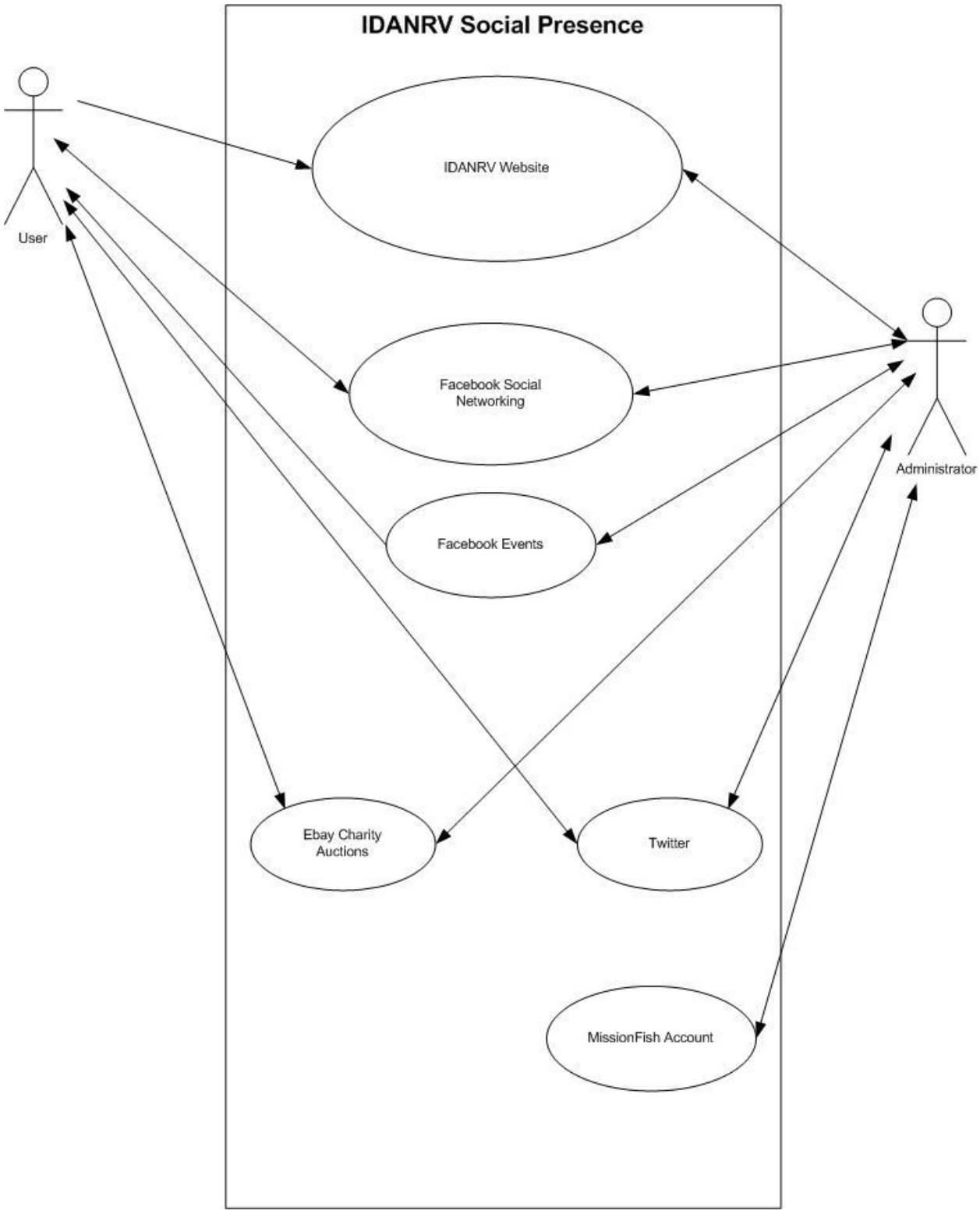
- The user attempts to visit the web site.
- The browser in use fails to properly display the IDA web page.
- The page is inactive, and is failing to load.
- Our system will compensate for this possibility by being robust, and browser-frieldly.

If the admin wishes to update their Facebook, this would be a successful scenario:

- Administrator logs on to the IDA Facebook.
- Once logged on, the Administrator has several options in regards to updating the IDA Facebook.
    - Administrator can edit profile, pictures, and information to keep public informed on events and updates.
    - Administrator can request and remove friends, send event invitations, and receive event invitations.
    - Administrator can receive comments and messages and respond.
- By and large, the administrator will have several different methods of staying in contact with site visitors and updating information on behalf of the IDA. All of this can be done in a matter of minutes.

8. Preliminary Use Case Models and Sequence Diagrams

8.1 Use Case Model



8.2 Sequence Diagrams

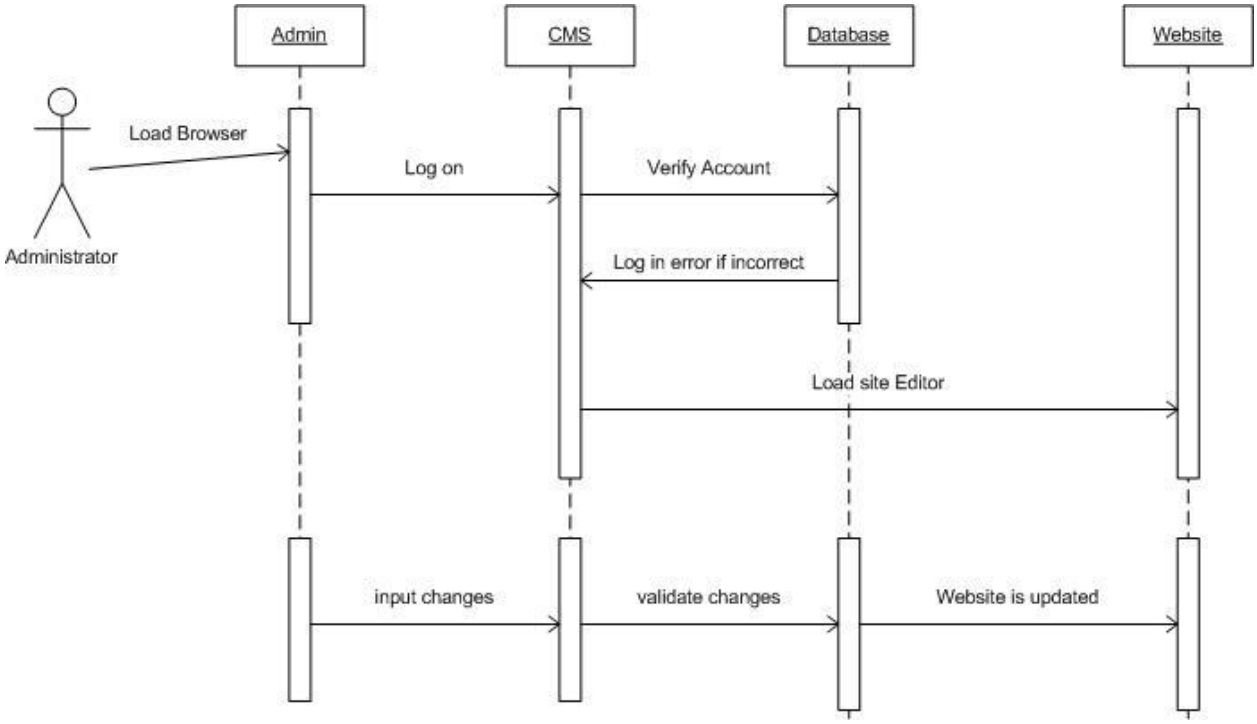


Figure 1: System Administrator Sequence Diagram

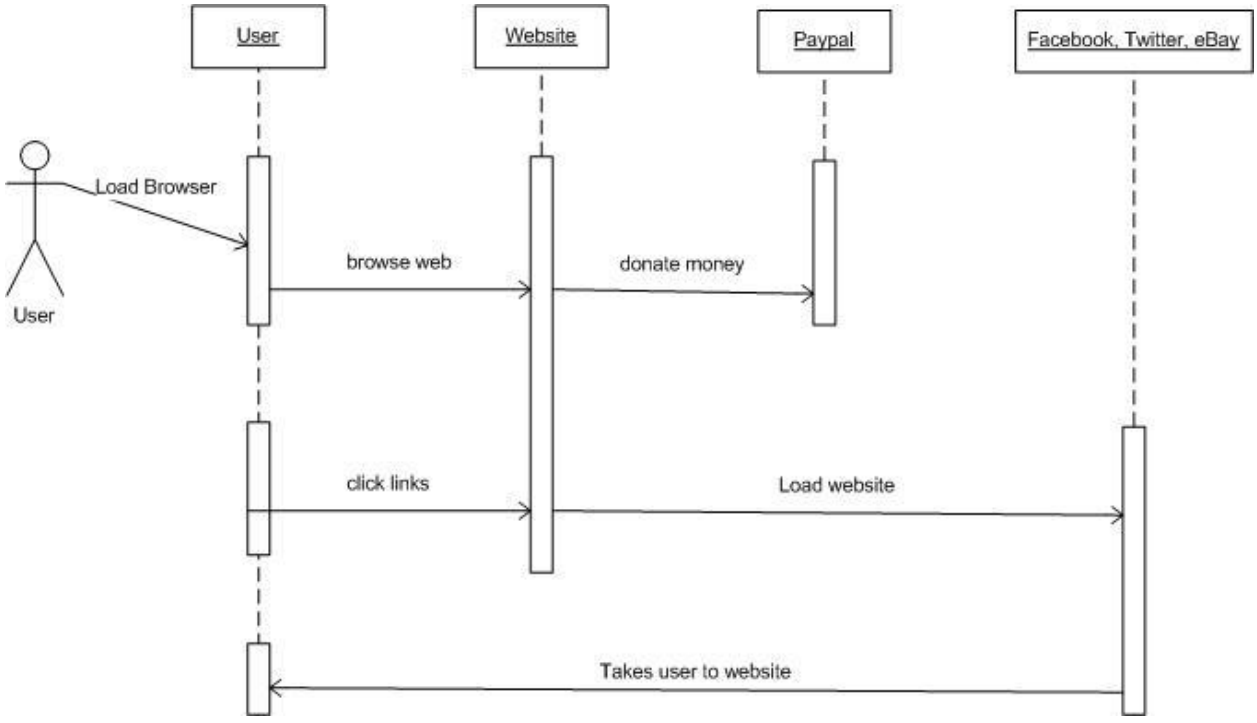


Figure 2: System User Sequence Diagram

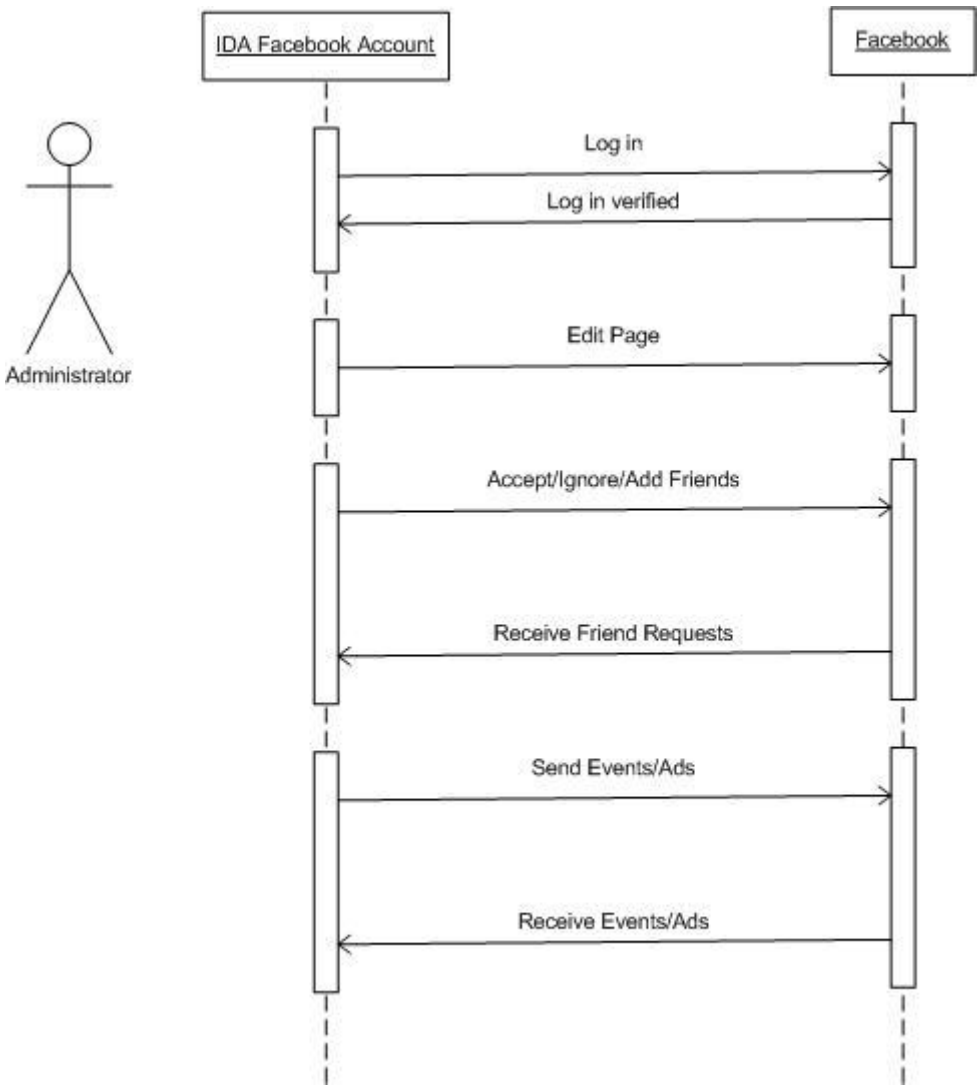
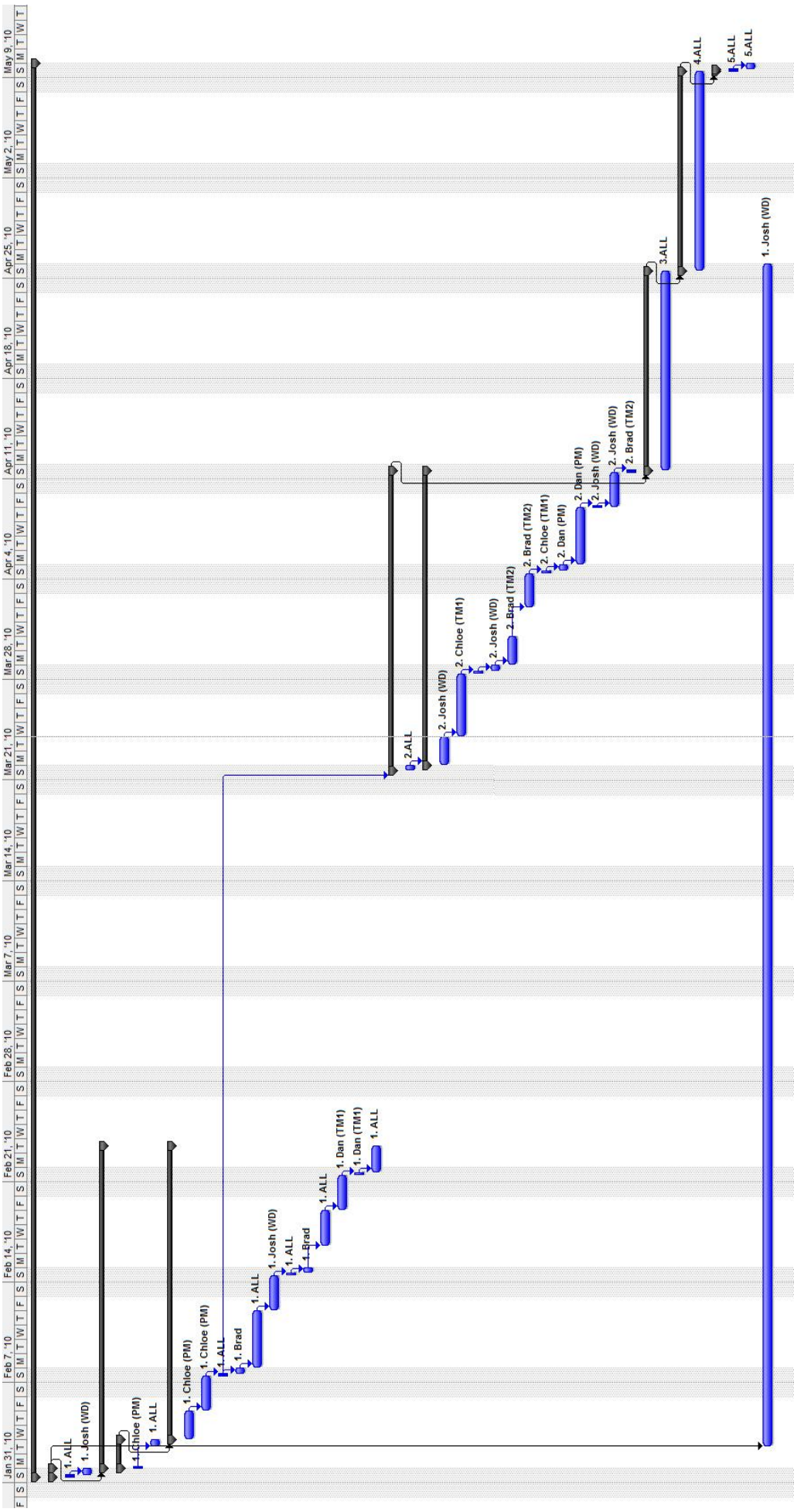


Figure 3: Facebook Admin. Sequence Diagram

9. Updated Schedule

	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	**Software Engineering Project**	**56.63 days**	**Sun 1/31/10**	**Sun 5/9/10**		**1. ALL**
2	**Initial Team Meeting**	**2 days**	**Sun 1/31/10**	**Sun 1/31/10**		**1. ALL**
3	Logo Design	1 day	Sun 1/31/10	Sun 1/31/10		1. ALL
4	Web Development	1 day	Sun 1/31/10	Sun 1/31/10	3	1. Josh (WD)
5	**Planning**	**12.25 days**	**Sun 1/31/10**	**Tue 2/23/10**	**2**	**1. Chloe (PM)**
6	**Initial Planning Meeting**	**1 day**	**Sun 1/31/10**	**Tue 2/2/10**		**1. ALL**
7	Assign Roles	0.5 days	Sun 1/31/10	Sun 1/31/10		1. Chloe (PM)
8	Brainstorm	0.5 days	Tue 2/2/10	Tue 2/2/10	7	1. ALL
9	**Write/Organize Document**	**11.25 days**	**Tue 2/2/10**	**Tue 2/23/10**	**6**	**1. ALL**
10	Team Info	0.25 days	Tue 2/2/10	Thu 2/4/10		1. Chloe (PM)
11	Project Objectives	1 day	Thu 2/4/10	Sun 2/7/10	10	1. Chloe (PM)
12	Scope	1 day	Sun 2/7/10	Sun 2/7/10	11	1. ALL
13	Project Success Criteria	1 day	Sun 2/7/10	Sun 2/7/10	12	1. Brad
14	Resources	1 day	Sun 2/7/10	Thu 2/11/10	13	1. ALL
15	Stakeholders	1 day	Thu 2/11/10	Sun 2/14/10	14	1. Josh (WD)
16	Risk Analysis	1 day	Sun 2/14/10	Sun 2/14/10	15	1. ALL
17	Project Managers	1 day	Sun 2/14/10	Sun 2/14/10	16	1. Brad
18	Project Objectives and Priorities	1 day	Tue 2/16/10	Thu 2/18/10	17	1. ALL
19	Project Plan	1 day	Thu 2/18/10	Sun 2/21/10	18	1. Dan (TM1)
20	Budget	1 day	Sun 2/21/10	Sun 2/21/10	19	1. Dan (TM1)
21	Review	1 day	Sun 2/21/10	Tue 2/23/10	20	1. ALL
22	**Requirements**	**11.13 days**	**Sun 3/21/10**	**Sun 4/11/10**	**12**	**2. Dan (PM)**
23	Initial Meeting	0.13 days	Sun 3/21/10	Sun 3/21/10		2.ALL
24	**Software Requirements Doc**	**11 days**	**Sun 3/21/10**	**Sun 4/11/10**	**23**	
25	Introduction	1 day	Sun 3/21/10	Tue 3/23/10		2. Josh (WD)
26	General Description	1 day	Tue 3/23/10	Sun 3/28/10	25	2. Chloe (TM1)
27	Identified Functional Requirements	1 day	Sun 3/28/10	Sun 3/28/10	26	
28	Interface Requirements	1 day	Sun 3/28/10	Sun 3/28/10	27	2. Josh (WD)
29	Performance Requirements	1 day	Sun 3/28/10	Tue 3/30/1	28	2. Brad (TM2)
30	Non-Functional Attributes	1 day	Thu 4/1/10	Sun 4/4/10	29	2. Brad (TM2)
31	Operational Scenarios	1 day	Sun 4/4/10	Sun 4/4/10	30	2. Chloe (TM1)
32	Designed Use Case Diagram	1 day	Sun 4/4/10	Sun 4/4/10	31	2. Dan (PM)
33	Designed Sequence Diagram	1 day	Sun 4/4/10	Thu 4/8/10	32	2. Dan (PM)
34	Updated Schedule	0.5 days	Thu 4/8/10	Thu 4/8/10	33	2. Josh (WD)
35	Updated Budget	0.5 days	Thu 4/8/10	Sun 4/11/10	34	2. Josh (WD)
36	Appendices	1 day	Sun 4/11/10	Sun 4/11/10	35	2. Brad (TM2)
37	**Design**	**7.25 days**	**Sun 4/11/10**	**Sun 4/25/10**	**22**	**3. Josh (PM)**
38	Initial Meeting	7.25 days	Sun 4/11/10	Sun 4/25/10		3.ALL
39	**Development**	**7.25 days**	**Sun 4/25/10**	**Sun 5/9/10**	**37**	**4. Brad (PM)**
40	Initial Meeting	7.25 days	Sun 4/25/10	Sun 5/9/10		4.ALL
41	**Presentation**	**1 day**	**Sun 5/9/10**	**Sun 5/9/10**	**39**	**5. Chloe (PM)**
42	Initial Meeting	1 day	Sun 5/9/10	Sun 5/9/10		5.ALL
43	User Manual	1 day	Sun 5/9/10	Sun 5/9/10	42	5.ALL
44	Web Updates	46 days	Tue 2/2/10	Sun 4/25/10	2	1. Josh (WD)


Jan 31, '10
Feb 7, '10
Feb 14, '10
Feb 21, '10
Feb 28, '10
Mar 7, '10
Mar 14, '10
Mar 21, '10
Mar 28, '10
Apr 4, '10
Apr 11, '10
Apr 18, '10
Apr 25, '10
May 2, '10
May 9, '10
1. ALL
1. Josh (WD)
1. Chloe (PM)
1. ALL
1. Chloe (PM)
1. ALL
1. Brad
1. ALL
1. Josh (WD)
1. ALL
1. Brad
1. ALL
1. Dan (TM1)
1. Dan (TM1)
1. ALL
2. ALL
2. Josh (WD)
2. Chloe (TM1)
2. Josh (WD)
2. Brad (TM2)
2. Brad (TM2)
2. Chloe (TM1)
2. Dan (PM)
2. Dan (PM)
2. Josh (WD)
2. Josh (WD)
2. Brad (TM2)
3.ALL
4.ALL
5.ALL
5.ALL
1. Josh (WD)

10. Updated Budget

	Task Name	Total Cost	Baseline	Variance	Actual	Remaining
1	**Software Engineering Project**	**$197,226.00**	**$197,935.00**	**($709.00)**	**$0.00**	**$197,226.00**
2	**Initial Team Meeting**	**$5,160.00**	**$5,160.00**	**$0.00**	**$0.00**	**$5,160.00**
3	Logo Design	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
4	Web Development	$360.00	$360.00	$0.00	$0.00	$360.00
5	**Planning**	**$38,440.00**	**$38,440.00**	**$0.00**	**$0.00**	**$38,440.00**
6	**Initial Planning Meeting**	**$2,700.00**	**$2,700.00**	**$0.00**	**$0.00**	**$2,700.00**
7	Assign Roles	$300.00	$300.00	$0.00	$0.00	$300.00
8	Brainstorm	$800.00	$800.00	$0.00	$0.00	$800.00
9	**Write/Organize Document**	**$28,390.00**	**$28,390.00**	**$0.00**	**$0.00**	**$28,390.00**
10	Team Info	$150.00	$150.00	$0.00	$0.00	$150.00
11	Project Objectives	$600.00	$600.00	$0.00	$0.00	$600.00
12	Scope	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
13	Project Success Criteria	$320.00	$320.00	$0.00	$0.00	$320.00
14	Resources	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
15	Stakeholders	$360.00	$360.00	$0.00	$0.00	$360.00
16	Risk Analysis	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
17	Project Managers	$320.00	$320.00	$0.00	$0.00	$320.00
18	Project Objectives and Priorities	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
19	Project Plan	$320.00	$320.00	$0.00	$0.00	$320.00
20	Budget	$320.00	$320.00	$0.00	$0.00	$320.00
21	Review	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
22	**Requirements**	**$10,766.00**	**$24,475.00**	**($13,709.00)**	**$0.00**	**$10,766.00**
23	Initial Meeting	$208.00	$17,800.00	($17,592.00)	$0.00	$208.00
24	**Software Requirements Document**	**$3,880.00**	**$0.00**	**$3,880.00**	**$0.00**	**$3,880.00**
25	Introduction	$360.00	$0.00	$360.00	$0.00	$360.00
26	General Description	$320.00	$0.00	$320.00	$0.00	$320.00
27	Identified Functional Requirements	$0.00	$0.00	$0.00	$0.00	$0.00
28	Interface Requirements	$360.00	$0.00	$360.00	$0.00	$360.00
29	Performance Requirements	$320.00	$0.00	$320.00	$0.00	$320.00
30	Non-Functional Attributes	$320.00	$0.00	$320.00	$0.00	$320.00
31	Operational Scenarios	$320.00	$0.00	$320.00	$0.00	$320.00
32	Designed Use Case Diagram	$600.00	$0.00	$600.00	$0.00	$600.00
33	Designed Sequence Diagram	$600.00	$0.00	$600.00	$0.00	$600.00
34	Updated Schedule	$180.00	$0.00	$180.00	$0.00	$180.00
35	Updated Budget	$180.00	$0.00	$180.00	$0.00	$180.00
36	Appendices	$320.00	$0.00	$320.00	$0.00	$320.00
37	**Design**	**$15,950.00**	**$15,950.00**	**$0.00**	**$0.00**	**$15,950.00**
38	Initial Meeting	$11,600.00	$11,600.00	$0.00	$0.00	$11,600.00
39	**Development**	**$15,950.00**	**$15,950.00**	**$0.00**	**$0.00**	**$15,950.00**
40	Initial Meeting	$11,600.00	$11,600.00	$0.00	$0.00	$11,600.00
41	**Presentation**	**$2,200.00**	**$2,200.00**	**$0.00**	**$0.00**	**$2,200.00**
42	Initial Meeting	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
43	User Manual	$1,600.00	$1,600.00	$0.00	$0.00	$1,600.00
44	Web Updates	$16,560.00	$16,560.00	$0.00	$0.00	$16,560.00

11. Appendices

11.1 Definitions, Acronyms, Abbreviations

- HTML: Hyper-Text Markup Language
- IDA: Intellectual Disabilities Agency
- IDANRV: Intellectual Disabilities Agency of the New River Valley
- PS: Photoshop
- DW: Adobe Dreamweaver
- CMS: Content Management System
- PHP: PHP Hypertext Processor
- W3C: World Wide Web Consortium
- SQL: Structured Query Language
- CSS: Cascading Style Sheets
- API: Application Programming Interface

11.2 References

Provides complete citations to all documents and meetings referenced or used in the preparation of this document.

http://www.radford.edu/softeng01
http://www.idanrv.org
http://givingworks.ebay.com/