**Software Requirements Specification**

**For**

**Texas State Computer Science Club Website**

**Version 2.5**

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# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Raul Zuniga | 10/4/2015 | Initial version. Completed sections 2.1-2.5. | 1.0 |
| Forrest Cross | 10/9/2015 | Added section 5.9 Careers page. | 1.1 |
| Firdaus Botirzoda | 10/9/2015 | Added more detail to 5.6 Projects page. | 1.2 |
| Firdaus Botirzoda | 10/9/2015 | Added5.10 Forums page. | 1.3 |
| Raul Zuniga | 10/9/2015 | Added section 5.7 Join page. | 1.4 |
| Trey Dalziel | 10/9/2015 | Added section 5.8 Events page | 1.5 |
| Jie Zhou | 10/9/2015 | Added section 5.5 Officers page. | 1.6 |
| Jie Zhou | 10/9/2015 | Added use case for Officers page | 1.7 |
| Firdaus Botirzoda | 10/9/2015 | Added use cases for the Projects and Forums page | 1.8 |
| Raul Zuniga | 10/9/2015 | Added section 5.1 Secondary content for each page & section 5.2 Home page | 1.9 |
| Antonio Moreno | 10/9/2015 | Added section 5.3 About Us page. | 2.0 |
| Raul Zuniga | 10/10/2015 | Added section 3 Overall Description | 2.1 |
| Antonio Moreno | 10/10/2015 | Added use case for the About Us page | 2.2 |
| Raul Zuniga | 10/12/2015 | Added uses cases for Home and Join pages | 2.3 |
| Trey Dalziel | 11/8/2015 | Added use case for Events page | 2.4 |
| Raul Zuniga | 11/10/2015 | Added Section 6 Traceability Matrix | 2.5 |

# Introduction

## Purpose

The reason for this document is to present a detailed description of a new club website for the Texas State Computer Science Club, called the Exe Club. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for the stakeholders, which consists of Joshua Galindo, the club president, the club officers, and the manager and software engineers who will develop the system. The Exe Club will be proposed this document for its approval.

## Product Scope

The system will provide information about the Exe Club and its activities. The scope of the site will include information about the club, its constitution and ongoing projects. Free and paid member online registration will be offered. As news and events change news and calendar events will be delivered dynamically. Career opportunities and job skill enhancement will be addressed. A discussion board or forums will address specific topics of interest to the club and offer a platform for communication. The system will include a relational database containing member, news, and event and discussion information.

The benefits of the site will include topical information to those interested in computer science and computer information systems. Opportunities for skill enhancement and social interaction will be promoted. The system will connect to social media such as Facebook and Twitter to allow the club to communicate with its members in real time. The site will provide a sense of community to the students and its supporters outside of the classroom.

## Document Conventions

Every detailed requirement statement will have its own priority. This priority will not be inherited by higher-level requirements.

## Intended Audience and Reading Suggestions

The audience for this SRS is the officers of the Exe Club, the project manager, software and test engineers of the system and documentation writers. It is written in natural English language so a broad audience of stakeholders could understand it. In chapter, 1 of the SRS is an introduction to the overall system. Chapter 2 gives a description of the formal requirements of the system. Chapter 3 covers the informal requirements of the system.

## References

Texas State Computer Science Club. n.d. 6 October 2015. <http://exe-txst.weebly.com/>.

IEEE. IEEE Std 1016-1998 IEEE Recommended Practice for Software Design Document. Prod. IEEE Computer Society. 1998.

## Overall Description

## Product Perspective

This software product is a new version of the Exe Club's web site. The website will be the main user interface where users can operate all the provided functionality. However, the web site will be part of a larger system. A domain and host provider will host the website where all the project files will be stored. There will be a database server where all user data is stored. The Exe Club's web site will be the only interface for the user data and execution of provided functionality. PHP script(s) residing on a host provider's server will act a controller of the flow of data between the database and the web interface.

Users can become a member by registering through the web interface. Whenever a new user registers, all the required data will be stored in a database. User will be able to update member information by retrieving member information through the web interface, update it, and have the information stored in the database.

## Product Functions

The new Exe Club website will have a number of features. Figure one shows a site map of the website. Summarized as below are required features of the product.

1. Describe general information such as the mission statement, rules of the club, and the club officers.
2. Describe the location and the time of the weekly meeting.
3. Provide a map of the location where the weekly meeting is held.
4. Provide a means by which user can become a member of the club and update member information.
5. Deliver news and calendar events.
6. Provide information on events such as company speakers and on-site company trips.
7. Describe the main project groups within the club that provide job skill enhancement.
8. Provide career and job skill enhancement information.
9. Provide a discussion board for members to discuss topics of interest.



Figure 1 Exe Club website site map

## Operating Environment

The Exe Club website will be stored on a third party host provider's Dual Quad Processor Performance on Linux operating system using customized Apache Web Server. The host provider will also proved a MySQL 5 database server to store club data using MySQL software. The site will run on multiple 10 Gigabit Ethernet Connections. There will 24/7 network monitoring.

The website will run on any browser including Chrome, Firefox, Safari, Internet Explorer and Opera. It will on different devices with different screen sizes.

## Design and Implementation Constraints

Authorization to modify data stored in the database will be limited to Exe Club officers and the developer(s) of the site. The authorization tools of the MySQL Software Server will be used for this. The Internet protocol used between the client’s browser and web server will be Hypertext Transfer Protocol (HTTP), which is designed to enable communications between clients and servers. The POST method, used for request-response between client and server, submits data to be processed to a specified server in a secure manner because data is not displayed in the URL. POST request are never cached, do not remain in the browser history, cannot be bookmarked, and have no restrictions on length. It will be the Exe Club officers to maintain the delivered software.

## Assumptions and Dependencies

There are no assumptions and dependencies.

# External Interface Requirements

## User Interfaces

The website shall work and be tested on the following browsers: Internet Explorer, Firefox, Google Chrome, Apple Safari, and Opera. The website shall work and be tested on different devices such as a desktop, tablet with 10 inch screen, and different mobile phones.

## Communications Interfaces/

The Internet protocol used between the client’s browser and web server will be Hypertext Transfer Protocol (HTTP), which is designed to enable communications between clients and servers. The method used for request-response between client and server will be POST. This method submits data to be processed to a specified server in a secure manner because data is not displayed in the URL.

# Functional Requirements

## Secondary Content for each page

### Global Navigation

#### The logo of the Exe Club will be displayed in the top left of each page of the site.

#### There shall be a link to the Home page in a global navigation bar for each page.

#### There shall be a link to the About Us page in a global navigation bar for each page.

#### There shall be a link to the Constitution page in a global navigation bar for each page.

#### There shall be a link to the Projects page in a global navigation bar for each page.

#### There shall be a link to the Join page in a global navigation bar for each page.

#### There shall be a link to the Events page in a global navigation bar for each page.

#### There shall be a link to the Career page in a global navigation bar for each page.

#### There shall be a link to the Forums page in a global navigation bar for each page.

#### The logo of the Exe Club will be displayed in the left right of each page of the site.

### Right Side Navigation

#### There shall be an e-mail icon displayed.

#### The user's email client will be invoked when the e-mail icon is clicked.

#### The EXE contact will be listed in the email header

#### There will be a Facebook icon displayed.

#### When the Facebook icons clicked, it will take you to their Facebook page

#### There shall be a list of events with their dates and times displayed.

### Footer

#### A footer navigation bars shall will be on each page on the site.

#### Copyright information will displayed in the footer.

## Home page

### Primary Content

#### On the home page there shall be images displayed of different activities of the group that will be displayed on the page for a few seconds.

#### On the home page a new image shall be rotated in to replace the previous image after three seconds.

#### On the home page a brief descriptions of the Exe Club's mission statement will be displayed in a paragraph.

## About us page

### Primary Content

#### On the About Us page it will contain information about the Texas State Computer Science Club.

#### On the About Us page it will display dates and times of the meetings.

#### On the About Us page a google map will show the location of Derrick Hall.

## Officers page

### Primary Content

#### The officers page shall contain pictures of the officers.

#### The officers page shall contain each officers joined date.

#### The officers page shall contain information about each officers position.

#### The officers page shall list each officers achievements.

## Constitution page

#### The constitution page shall specify the club rules. (Josh Galindo will provide this)

#### The constitution page shall have a button for printing the constitution.

#### The print button shall redirect to a pdf file

## Projects page

### Primary Content

#### The Projects page shall contain an image that is a link to the Game Development page.

#### The Projects page shall contain a description underneath the image of the Game Development group.

#### The Projects page shall contain an image that is a link to the Android Application Development page.

#### The Projects page shall contain a description underneath the image of the Android Application Development group.

#### The Projects page shall contain an image that is a link to the Web Development page.

#### The Projects page shall contain a description underneath the image of the Web Development group.

#### The Projects page shall contain an image that is a link to the Program Development page.

#### The Projects page shall contain a description underneath the image of the Program Development group.

### Left Side Navigation

#### In the Projects page there shall be a link to the Game Development page in a left side navigation bar.

#### In the Projects page when Game Development link is clicked, it takes the user to the Game Development page.

#### In the Projects page there shall be a link to the Web Development page in a left side navigation bar.

#### In the Projects page when the Web Development link is clicked, it takes the user to the Web Development page.

#### In the Projects page there shall be a link to the Program Development page in a left side navigation bar.

#### In the Projects page when the Program Development link is clicked, it takes the user to the Program Development page.

#### In the projects page there shall be a link to the Android Development page in a left side navigation bar.

#### In the Projects page when the Android Development link is clicked, it will take the user to the Android Application Development page.

### Game Development Page

#### The Game Development page will contain information about the Game Development group

### Android Development Page

#### The Android Development page will contain information about the Android Application Development group.

### Web Development Page

#### The Web Development page will contain information about the Web Development group.

### Program Development Page

#### The Program Development page will contain information about the Program Development group.

## Join Page

### Primary Content

#### The Join page shall contain a HTML form for a person to enter information.

#### The Join page shall contain a header stating that the purpose of the form is for membership signup.

#### The Join page shall contain an input for entering the first name.

#### The Join page shall require the first name input.

#### The Join page shall contain an input for entering the middle initial.

#### The Join page shall contain input for entering the last name.

#### In the Join page the last name input shall be required.

#### The Join page shall contain an input for entering an email address.

#### The email address input will be required.

#### The Join page shall contain a drop down list, which specifies a major.

#### In the Join page the drop down list for major shall contain ‘computer science’.

#### The Join page shall contain the drop down list for major shall contain ‘computer information systems’.

#### The Join page shall contain the drop down list for major shall contain ‘other’.

#### The Join page shall contain a drop down list, which specifies a classification.

#### In the Join page the drop down list for major shall contain ‘freshman.

#### In the Join page the drop down list for major shall contain ‘sophomore’.

#### In the Join page the drop down list for major shall contain ‘junior’.

#### In the Join page the drop down list for major shall contain ‘senior’.

#### The Join page shall contain an input for the graduation date.

#### In the Join page the graduation date input will allow the user to type in the date.

#### In the Join page the graduation date input will allow the user to click the field and a calendar widget shall appear.

#### In the Join page the graduation widget shall graphically select the day, month, and year.

#### The Join page shall contain a drop down list, which specifies the size of a t-shirt.

#### In the Join page the drop down list for major shall contain ‘small’.

#### In the Join page the the drop down list for major shall contain ‘medium’.

#### In the Join page the the drop down list for major shall contain ‘large’.

#### In the Join page the the drop down list for major shall contain ‘extra large’.

#### The Join page shall contain a Submit button.

#### The Join page shall contain a Reset button.

#### The Join page shall retain any information entered if the user navigates to another page and comes back before submitting the form.

#### In the Join page when Submit button is pressed the information in the required fields (first name, last name, and email) shall be validated for correct format.

#### The Join page when the Submit button is pressed the form information will be stored.

#### The Join page when the Reset button is pressed, it will clear all input fields within the form.

## Events Page

### Primary Content

#### The Events page shall show based calendar with up upcoming events.

#### In the Events Page the calendar shall display names of upcoming events throughout the current month.

#### In the Events Page the calendar will show the name of the event in bold.

#### In the Events Page the calendar shall contain the event date.

#### In the Events Page the calendar shall show the name of the event creator.

#### In the Events Page the mouse over information shall show the time(s) of the event.

## Career page

### Information Interview

#### In the Careers page there shall be a text box containing information about Job fairs.

#### In the Careers page there shall be a text box containing information on other job opportunities.

### Career Portfolio

#### In the Careers page there shall be a text box containing information about how to build a resume that will stand out.

#### In the Careers page there shall be links to template resumes/career portfolios.

#### In the Careers page there shall be links to completed resumes/career portfolios from past members.

### *Career Planning*

#### In the Careers page there will be a text box containing information on different career paths in the Computer Science field.

#### In the Careers page there shall be a link to the Texas State Career Services page.

#### In the Careers page the link will be called "Career Planning".

### Job Interview

#### In the Careers page there shall be a text box containing tips and tricks about going into a job interview.

### Phone Interview

#### In the Careers page there shall be a text box containing information on how to properly conduct a phone interview.

## Forums Page

### Primary Content

#### In the Forums page it shall contain links for each topic with a short description

#### In the Forums page each topic will contain list of comments

#### In the Forums page each comment will have username of the commenter and number of likes

# Nonfunctional Requirements

## Performance requirements

The product will be web-based and will required powerful server machines with high band internet access so it can handle multiple users at the same time. The hosting provider we have selected has Dual Quad Processor Performance Servers. They have multiple 10 Gigabit Ethernet connections. They also have 24/7 monitoring.

Web application shall be a lightweight web application so that it can work in any platform, even with slower internet connection. Expected number of simultaneous users shall be at least 1000.

## Security Requirements

The product shall protect privacy of member and club data. User shall only be able access their own information. Club officers will have access to all user and club data. Club officers will have access to product files to allow them to maintain the site. All data will be transferred to the web server and database in a secure manner.

## Software Quality Attributes

Web site will be web accessible to people with special needs such as color blindness or blindness by following the Web Accessibility Initiative (WAI) guidelines, a consortium of organizations representing people with special needs.

## Business Rules

### Club officers will have authorization to the database and be able to act as database administrators.

### Club officers will have authorization access to product files that reside on the host provider's server to allow them to maintain and update the website.

### The developer(s) of the site will provide training to the club officers to allow them to administer the database, maintain, and update the website.

# Traceability Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technical Requirement ID** | **Test Case ID** | **Functional Requirement Description** | **Priority** | **Type** |
| 4.1.1.1 | 1 | The logo of the Exe Club will be displayed in the top left of each page of the site | Should | Interface |
| 4.1.1.2 | 2 | There shall be a link to the Home page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.3 | 3 | There shall be a link to the About Us page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.4 | 4 | There shall be a link to the Constitution page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.5 | 5 | There shall be a link to the Projects page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.6 | 6 | There shall be a link to the Join Us page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.7 | 7 | There shall be a link to the Events page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.8 | 8 | There shall be a link to the Forums page in a global navigation bar for each page. | Shall | Functional |
| 4.1.1.9 | 9 | There shall be a link a login screen in a global navigation bar for each page. | Shall | Functional |
| 4.1.2.1 | 10 | There shall be an e-mail icon displayed | Shall | Interface |
| 4.1.2.2 | 11 | The user's email client will be invoked when the e-mail icon is clicked | Shall | Functional |
| 4.1.2.3 | 12 | The EXE contact will be listed in the email header | Shall | Functional |
| 4.1.2.4 | 13 | There will be a Facebook icon displayed | Shall | Interface |
| 4.1.2.5 | 14 | When the Facebook icons clicked, it will take you to their Facebook page | Shall | Functional |
| 4.1.2.6 | 15 | There shall be a list of events with their dates and times displayed. |  |  |
| 4.1.3.1 | 16 | A footer navigation bars shall will be on each page on the sit | Should | Functional |
| 4.1.3.2 | 17 | Copyright information will displayed in the footer | Should | Functional |
| 4.2.1.1 | 18 | On the home page there shall be images displayed of different activities of the group that will be displayed on the page for a few seconds | Should | Interface |
| 4.2.1.2 | 19 | On the home page a new image shall be rotated in to replace the previous image after three seconds | Should | Interface |
| 4.2.1.3 | 20 | On the home page a brief descriptions of the Exe Club's mission statement will be displayed in a paragraph | Shall | Interface |
| 4.3.1.1 | 21 | On the About Us page it will contain information about the Texas State Computer Science Club | Shall | Interface |
| 4.3.1.2 | 22 | On the About Us page it will display dates and times of the meetings. | Shall | Interface |
| 4.3.1.3 | 23 | On the About Us page a google map will show the location of Derrick Hall | Shall | Functional |
| 4.4.1.1 | 24 | The officers page shall contain pictures of the officers | Shall | Interface |
| 4.4.1.2 | 25 | The officers page shall contain each officers joined date. | Shall | Interface |
| 4.4.1.3 | 26 | The officers page shall contain information about each officers position | Shall | Interface |
| 4.4.1.4 | 27 | The officers page shall list each officers achievements | Shall | Interface |
| 4.5.1.1 | 28 | The constitution page shall specify the club rules. | Shall | Interface |
| 4.5.1.2 | 29 | The constitution page shall have a button for printing the constitution | Shall | Functional |
| 4.5.1.3 | 30 | The print button shall redirect to a pdf file | Shall | Functional |
| 4.6.1.1 | 31 | The Projects page shall contain an image that is a link to Game Development page | Shall | Functional |
| 4.6.1.2 | 31 | The Projects page shall contain a description underneath the imageof the Game Development group | Shall | Interface |
| 4.6.1.3 | 32 | The Projects page shall contain an image that is a link to the Android Application Development page. | Shall | Functional |
| 4.6.1.4 | 33 | The Projects page shall contain a description underneath the image of the Android Application Development group. | Shall | Interface |
| 4.6.1.5 | 34 | The Projects page shall contain an image that is a link to the Web Development page | Shall | Functional |
| 4.6.1.6 | 35 | he Projects page shall contain a description underneath the image of the Web Development group | Shall | Interface |
| 4.6.1.7 | 36 | The Projects page shall contain an image that is a link to the Program Development page | Shall | Functional |
| 4.6.1.8 | 37 | The Projects page shall contain a description underneath the image of the Program Development group | Shall | Interface |
| 4.6.2.1 | 38 | In the Projects page there shall be a link to the Game Development page in a left side navigation bar. | Shall | Functional |
| 4.6.2.2 | 39 | In the Projects page when Game Development link is clicked, it takes the user to the Game Development page | Shall | Functional |
| 4.6.2.3 | 40 | In the Projects page there shall be a link to the Web Development page in a left side navigation bar | Shall | Functional |
| 4.6.2.4 | 41 | In the Projects page when the Web Development link is clicked, it takes the user to the Web Development page | Shall | Functional |
| 4.6.2.5 | 42 | In the Projects page there shall be a link to the Program Development page in a left side navigation bar | Shall | Functional |
| 4.6.2.6 | 43 | In the Projects page when the Program Development link is clicked, it takes the user to the Program Development page | Shall | Functional |
| 4.6.2.7 | 44 | In the projects page there shall be a link to the Android Development page in a left side navigation bar | Shall | Functional |
| 4.6.2.8 | 45 | In the Projects page when the Android Development link is clicked, it will take the user to the Android Application Development page | Shall | Functional |
| 4.6.3.1 | 46 | The Game Development page will contain information about the Game Development group | Shall | Interface |
| 4.6.4.1 | 47 | The Android Development page will contain information about the Android Application Development group | Shall | Interface |
| 4.6.5.1 | 48 | The Web Development page will contain information about the Web Development group | Shall | Interface |
| 4.6.6.1 | 49 | The Program Development page will contain information about the Program Development group | Shall | Interface |
| 4.7.1.1 | 50 | The Join page shall contain a HTML form for a person to enter information | Shall | Functional |
| 4.7.1.2 | 51 | The Join page shall contain a header stating that the purpose of the form is for membership signup | Shall | Functional |
| 4.7.1.3 | 52 | The Join page shall contain an input for entering the first name | Shall | Functional |
| 4.7.1.4 | 53 | The Join page shall require the first name input | Shall | Functional |
| 4.7.1.5 | 54 | The Join page shall contain an input for entering the middle initial | Shall | Functional |
| 4.7.1.6 | 55 | The Join page shall contain input for entering the last name | Shall | Functional |
| 4.7.1.7 | 56 | In the Join page the last name input shall be required. | Shall | Functional |
| 4.7.1.8 | 57 | The Join page shall contain an input for entering an email address | Shall | Functional |
| 4.7.1.9 | 58 | The email address input will be required | Shall | Functional |
| 4.7.1.10 | 59 | The Join page shall contain a drop down list, which specifies a major | Shall | Functional |
| 4.7.1.11 | 60 | In the Join page the drop down list for major shall contain ‘computer science’ | Shall | Functional |
| 4.7.1.12 | 61 | The Join page shall contain the drop down list for major shall contain ‘computer information systems’ | Shall | Functional |
| 4.7.1.13 | 62 | The Join page shall contain the drop down list for major shall contain ‘other’ | Shall | Functional |
| 4.7.1.14 | 63 | The Join page shall contain the drop down list for major shall contain ‘other’ | Shall | Functional |
| 4.7.1.15 | 64 | In the Join page the drop down list for major shall contain ‘freshman’ | Shall | Functional |
| 4.7.1.16 | 65 | In the Join page the drop down list for major shall contain ‘sophomore’ | Shall | Functional |
| 4.7.1.17 | 66 | In the Join page the drop down list for major shall contain ‘junior’ | Shall | Functional |
| 4.7.1.18 | 67 | In the Join page the drop down list for major shall contain ‘senior’ | Shall | Functional |
| 4.7.1.19 | 68 | The Join page shall contain an input for the graduation date | Shall | Functional |
| 4.7.1.20 | 69 | In the Join page the graduation date input will allow the user to type in the date | Shall | Functional |
| 4.7.1.21 | 70 | In the Join page the graduation date input will allow the user to click the field and a calendar widget shall appear | Shall | Functional |
| 4.7.1.22 | 71 | In the Join page the graduation widget shall graphically select the day, month, and year | Shall | Functional |
| 4.7.1.23 | 72 | The Join page shall contain a drop down list, which specifies the size of a t-shirt. | Should | Functional |
| 4.7.1.24 | 73 | In the Join page the drop down list for major shall contain ‘small’ | Should | Functional |
| 4.7.1.25 | 74 | In the Join page the the drop down list for major shall contain ‘medium | Should | Functional |
| 4.7.1.26 | 75 | In the Join page the the drop down list for major shall contain ‘medium | Should | Functional |
| 4.7.1.27 | 76 | In the Join page the the drop down list for major shall contain ‘extra large’ | Should | Functional |
| 4.7.1.28 | 77 | The Join page shall contain a Submit button | Shall | Functional |
| 4.7.1.29 | 78 | The Join page shall contain a Reset button | Shall | Functional |
| 4.7.1.30 | 79 | The Join page shall retain any information entered if the user navigates to another page and comes back before submitting the form | Shall | Functional |
| 4.7.1.31 | 80 | In the Join page when Submit button is pressed the information in the required fields (first name, last name, and email) shall be validated for correct format. | Shall | Functional |
| 4.7.1.32 | 81 | The Join page when the Submit button is pressed the form information will be stored | Shall | Functional |
| 4.7.1.33 | 82 | The Join page when the Reset button is pressed, it will clear all input fields within the form | Shall | Functional |
| 4.8.1.1 | 83 | The Events page shall show based calendar with up upcoming events | Shall | Functional |
| 4.8.1.2 | 84 | In the Events Page the calendar shall display names of upcoming events throughout the current month | Shall | Interface |
| 4.8.1.3 | 85 | In the Events Page the calendar will show the name of the event in bold | Shall | Interface |
| 4.8.1.4 | 86 | In the Events Page the calendar shall contain the event date | Shall | Interface |
| 4.8.1.5 | 87 | In the Events Page the calendar shall show the name of the event creator | Shall | Interface |
| 4.8.1.6 | 88 | In the Events Page the mouse over information shall show the time(s) of the event | Shall | Interface |
| 4.9.1.1 | 89 | In the Careers page there shall be a text box containing information about Job fairs | Shall | Interface |
| 4.9.1.2 | 90 | In the Careers page there shall be a text box containing information on other job opportunities. | Shall | Interface |
| 4.9.2.1 | 91 | In the Careers page there shall be a text box containing information about how to build a resume that will stand out | Shall | Interface |
| 4.9.2.3 | 92 | In the Careers page there shall be links to completed resumes/career portfolios from past members | Shall | Interface |
| 4.9.3.1 | 93 | In the Careers page there will be a text box containing information on different career paths in the Computer Science field. | Shall | Interface |
| 4.9.3.2 | 94 | In the Careers page there shall be a link to the Texas State Career Services page | Shall | Interface |
| 4.9.3.3 | 95 | In the Careers page the link will be called "Career Planning". | Shall | Interface |
| 4.9.4.1 | 96 | In the Careers page there shall be a text box containing tips and tricks about going into a job interview | Shall | Interface |
| 4.9.4.2 | 97 | In the Careers page there shall be a text box containing information on how to properly conduct a phone interview. | Shall | Interface |
| 4.10.1.1 | 98 | In the Forums page it shall contain links for each topic with a short description | Shall | Functional |
| 4.10.1.2 | 99 | In the Forums page each topic will contain list of comments | Shall | Functional |
| 4.10.1.3 | 100 | In the Forums page each comment will have username of the commenter and number of likes | Shall | Functional |

The forums page will be build using front end and back end technologies. Front end will include using HTML, CSS and bootstrap to create and design the forms (i.e. a textbox that receives a comment), making the page interactive, and a back end, which includes the database. For the back end, there are two main technologies that will be used to implement it: MySQL and Node.js. MySQL is for storing and querying all the data to and from the database tables. Node.js is called a controller, which is used for front and back end interactions. A user must be logged in to be authenticated. The design pattern that we will be using is a model/view controller - reusable way of doing thing. The page will be very interactive, where each topics page will have comments updated frequently.

# Appendix A: Use Cases

## Home page

A person wants to know what the Exe Club is about. The person navigates to the home page. The page has a global navigation page with links to the other pages of the site. There is a Facebook icon with a link to the club's Facebook page. There is an e-mail with a link email the club's contact person. There is set of images that rotate through promoting events and group project. Below that is the club’s mission statement so the user knows what the purpose is of the club.

## About us page

The About Us page has information about the computer science club at Texas State University. The purpose of this page is to provide dates and times for meetings where students can network with other individuals of any major and discuss different topics. The user will be able to find Derrick Hall at Texas State University by using the Google maps application program interface (API).

## 6.2 Officers page

### Brief description - the user can view officer’s picture, name, their graduation date and their comments.

## Constitution page

## Projects page

### Brief description - the user can get information about the project they are interested in.

## Join page

A person wants to join the Exe Club as a member. The person navigates to the home page and clicks on the link to a page where they can join. The page has a form so that the person can fill in the necessary information the club will need for them to join. The user presses a send button which validates the format of the data entered and stores it. A reset button is availabe if the user wishes to reset the form.

## Events page

The events page contains a calendar of all upcoming events that the Exe Club will be hosting and events pertaining to the Exe club.

## Career page

## Forums page

### Brief description - the user can post, comment or view other users posts and comments.

# Appendix B: Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Database | Collection of all the information monitored by this system. |
| Field | A cell within a form. |
| Member | A member of the Exe Club listed in the Exe database. |
| Software Requirements Specification | A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document. |
| Stakeholder | Any person with an interest in the project who is not a developer. |