User Interface Design

RoboNews.com

“Your Source For Robotics Coverage”

Client

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Team 3

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RoboNews.com
User Interface Design Document

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1. Introduction

1.1 Purpose of this document

This document will give detail on how to navigate through the RoboNews website in order to access its features. We will explain how the User Interface works and what each specific feature of the website will be used for. Readers will gain a better understanding of the RoboNews site through reading this document.

1.2 References

1. System Design Document

2. User Interface Standards

One key feature of our design that allows for consistency across the website is the inclusion of common header/footer files. These files are named frameTop.html and frameBottom.html, respectively. The header file consists of the site's banner and a sidebar with buttons and submenus that link to other features. The footer file simply closes HTML tags. Including these files allows dynamic content to be placed in a designated area, while the rest of the page (such as the banner and sidebar) remains static.

In the figure 1, static content areas are boxed in blue and dynamic content areas are boxed in red. These red areas will be referred to as the dynamic content areas in later sections of this document. The image on the left shows the login form, while the image on the right shows the work-in-progress homepage. These images demonstrate the concept discussed earlier: only the dynamic content area changes while navigating between pages.

Figure 1. Side by Side, Login and Home page draft

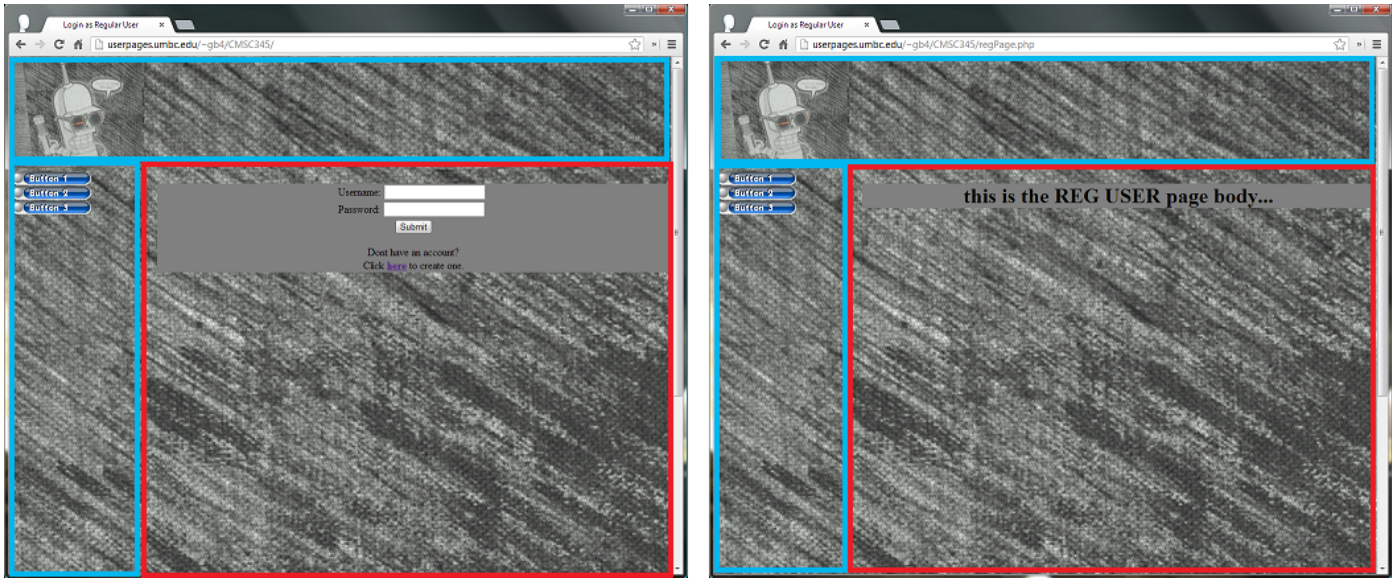
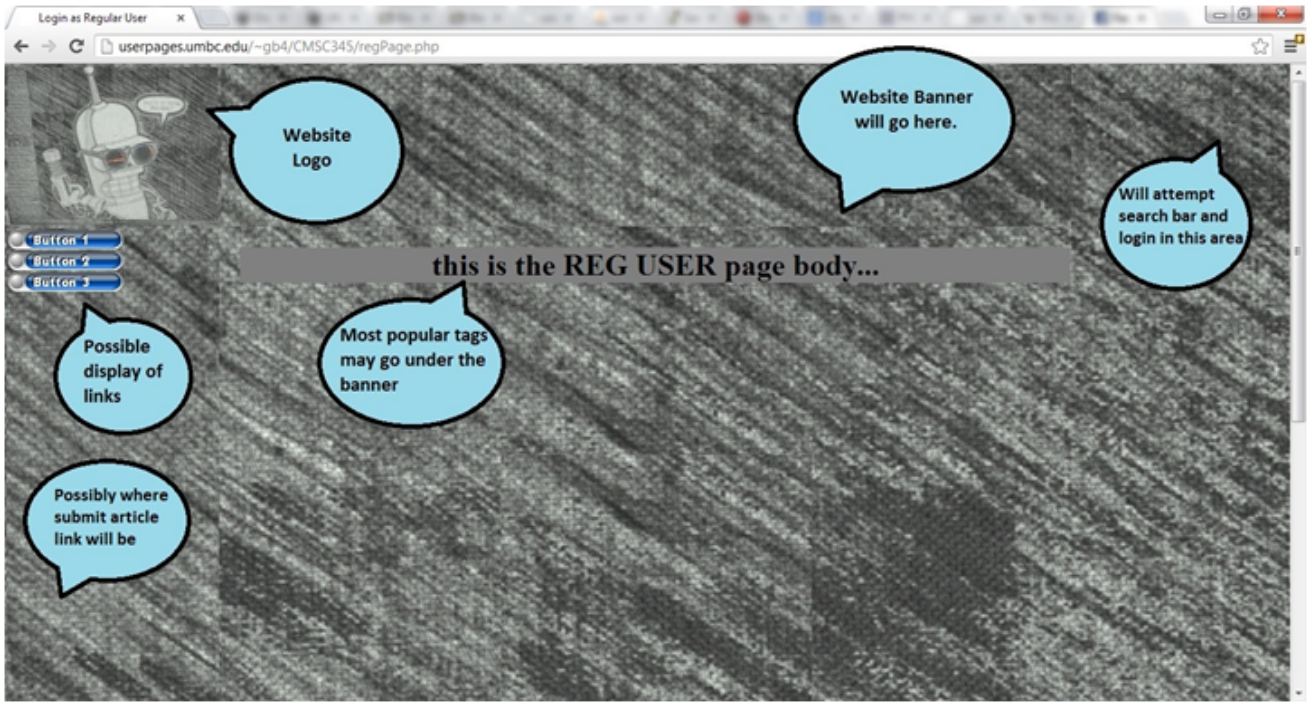
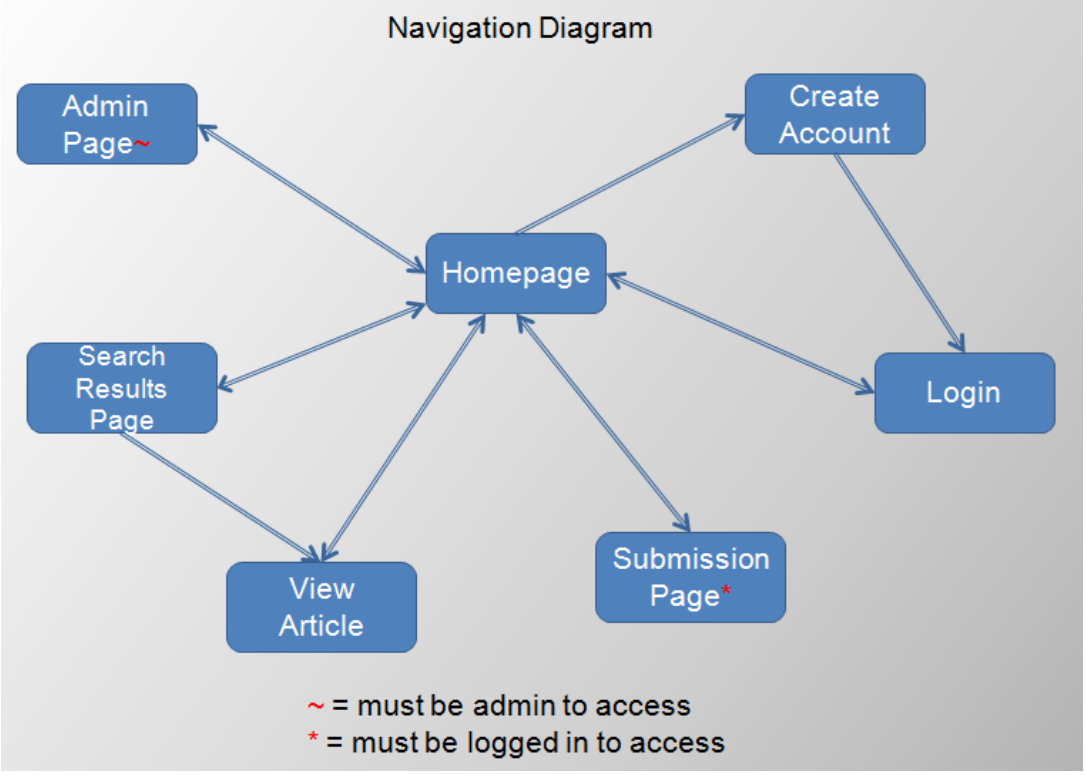


Figure 2 below shows the layout of the static content that is displayed on all pages. The top of the page consists of a website logo on the left, a banner in the center region, and a link to the login page as well as a search bar on the right. Note that the website logo is also a clickable link to the homepage. Beneath this will be a horizontal listing of the most popular tags. On the left side of the page (beneath the website logo) will be a sidebar containing buttons/submenus linking to other pages.

Figure 2. Static content



3. User Interface Walkthrough



When first accessing the RoboNews website, users will be taken to the homepage [see figure 3] where they will be able to access many features. The dynamic content portion of the homepage will display the most popular articles on the website. These articles will be displayed in the form of a “summary block” - a square that displays the article title, picture, and part of its summary/review. This format gives users a snapshot of the article, allowing them to quickly determine if it is relevant to their interests.

The Login page [see figure 4] allows users to sign-in to their account if they possess one (if they don’t they may register for one on the account registration page). Users can access the login page by clicking on the login link at the top of any page, unless of course they are already logged in.

Users will be able to submit robotics articles to RoboNews via the submission page [see figure 5]. Submitting an article requires a user to be logged in and to fill out a template. The template consists of the following fields: article title, the article url, a brief review or summary of the article, a url to a picture that is related to the article, and categorizations of the article in the form of tags (e.g. locomotion, medical robots, etc.). When the user has completed this template, the article will be available on the site through either the search bar or as a summary block on the homepage if it obtains a high enough rating.

When the search bar is used, the search results page [see figure 6] finds any articles that pertain to the search parameters. From the search results page, the user can access any of the articles that are displayed. When they access the article, they are directed to the page where the article and its review are displayed [see figure 7].

The account registration page [see figure 8] is used to create a new account on the website. Users will be prompted to enter their username, password, and email. Only after a user has created an account and logged in can they submit their own article, or rate other articles. The rating system will be a +1/-1 system. As stated earlier, the most popular rated articles are displayed on the home page.

Finally there is the admin page. Users who are admins will have the ability to block regular user accounts and they will be able to monitor and edit article submissions. The admin page is very similar to the home page but when they are signed in, the option to review or edit articles/reviews will be displayed.

Figure 3. Home page

Figure 4. Login Page

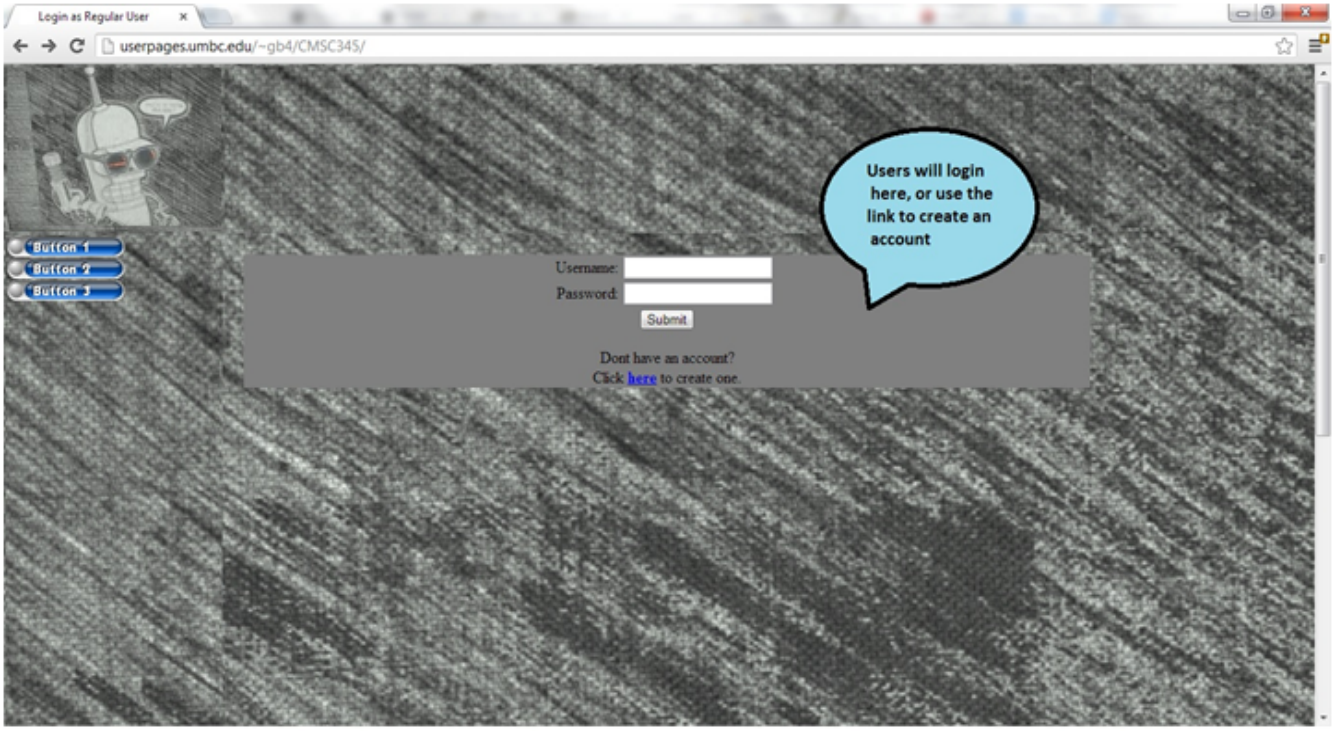


Figure 5. Article Submission page. (Early draft)

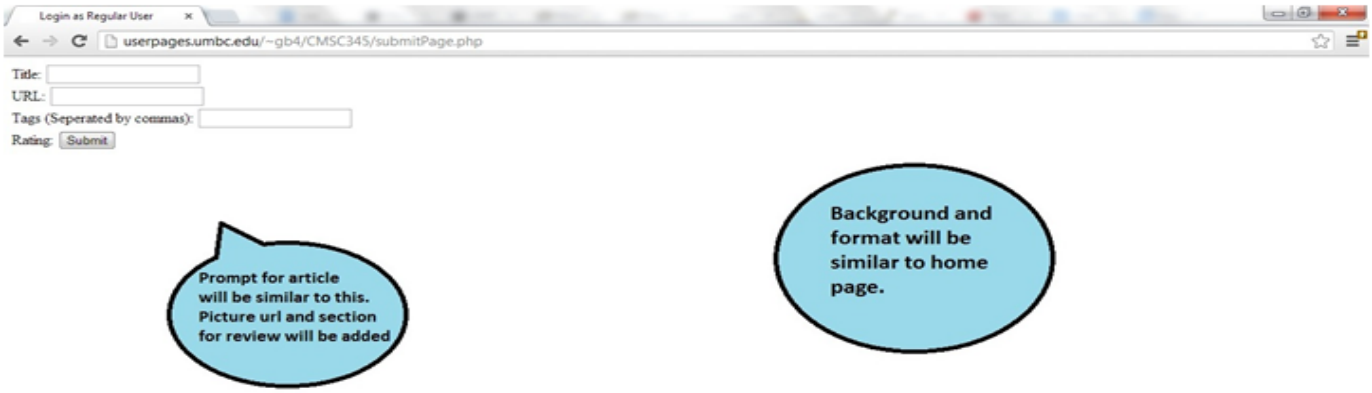


Figure 6. Search Result page (Powerpoint design draft)

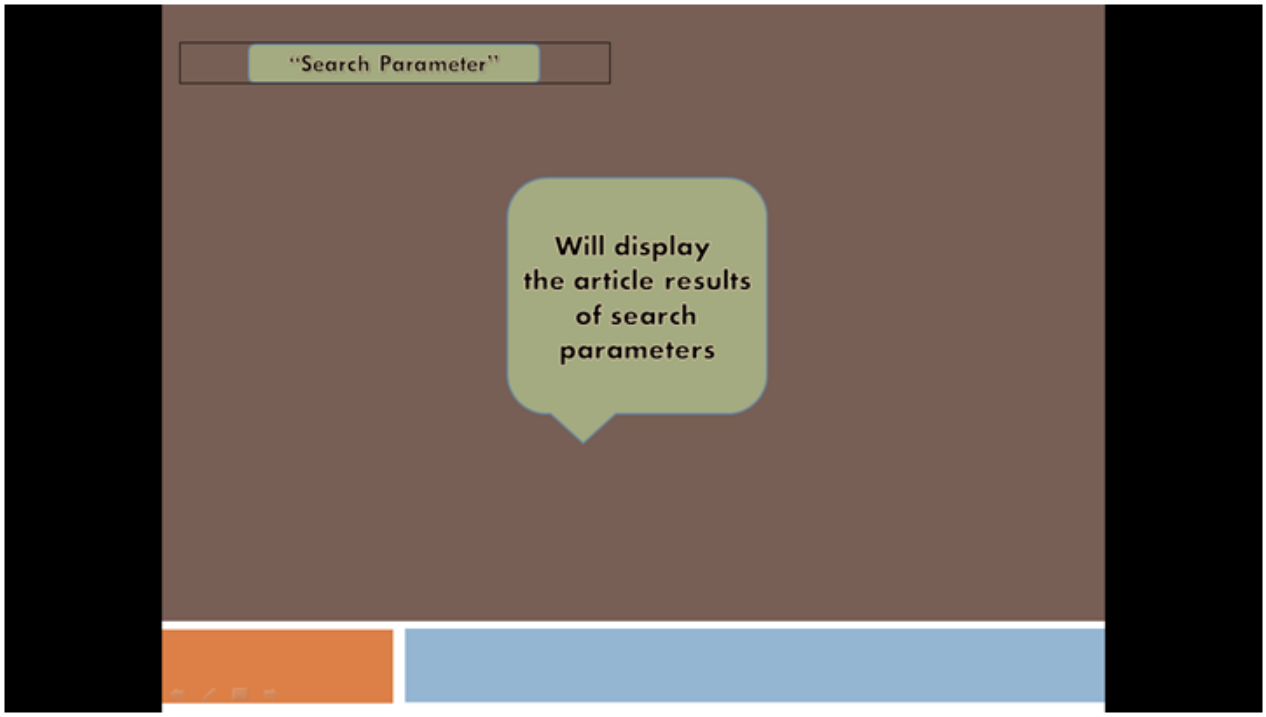


Figure 7. View article page (Powerpoint design draft)

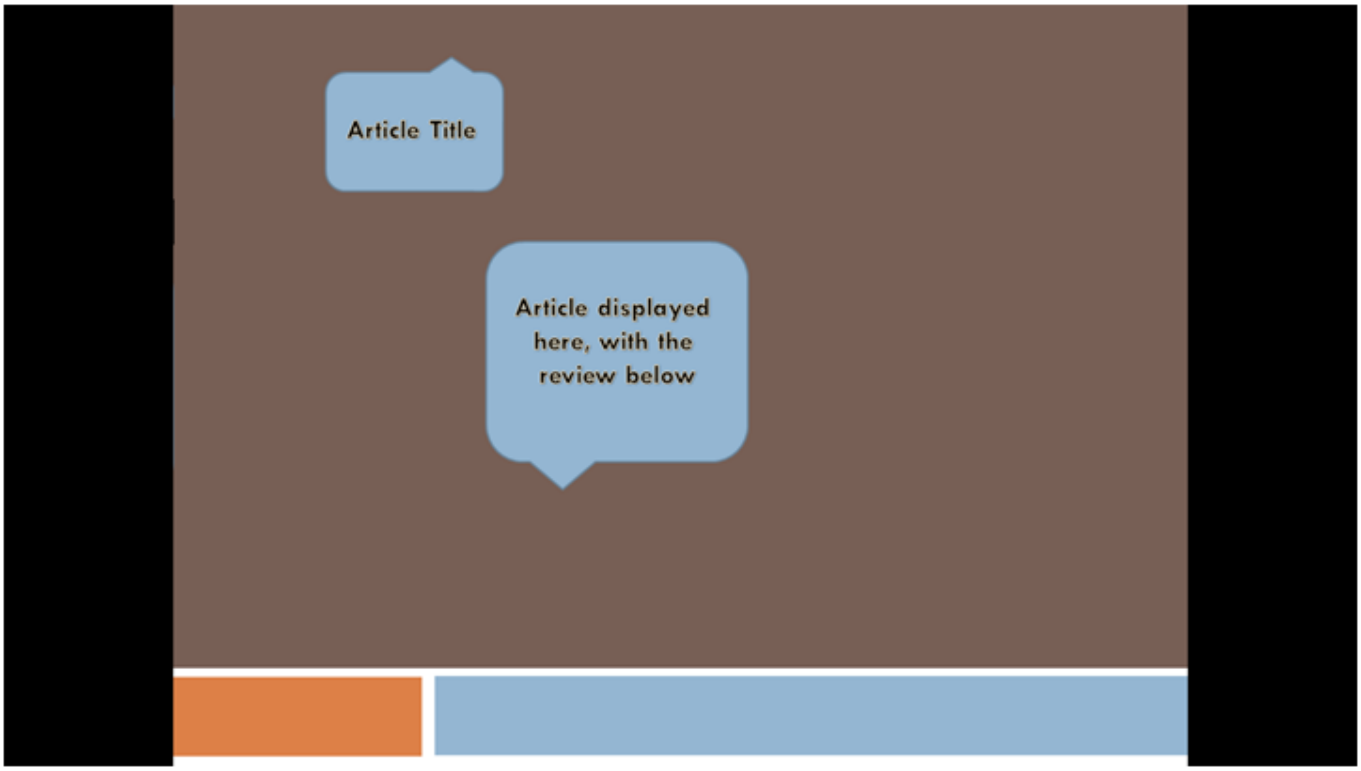
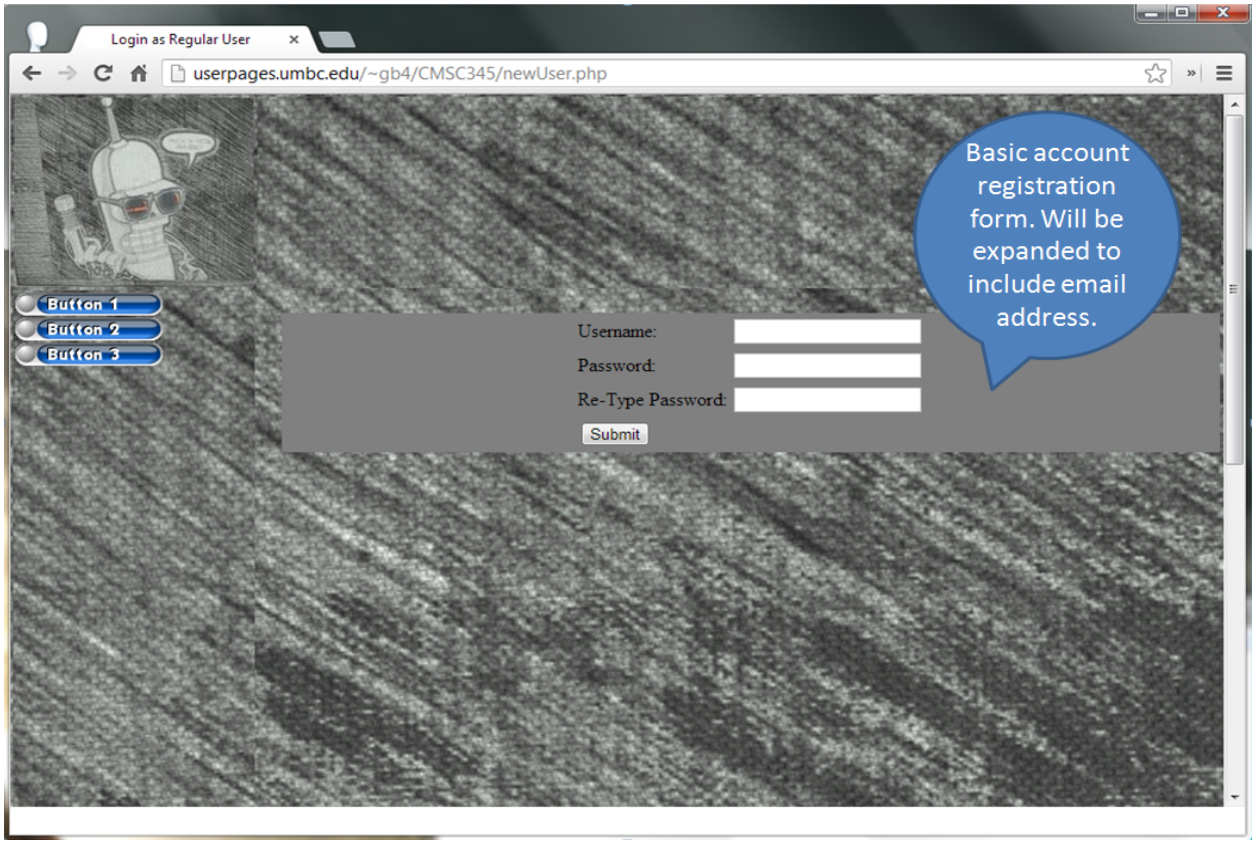


Figure 8. Account Registration page



4. Data Validation

Throughout the website there are many data entry points.

Entry Point	**Datatype**	**Constraints**
Username (login/account registration forms)	String	At least 1 character, less than 255 characters
Password (login/account registration forms)	String	At least 1 character, less than 255 characters
Email (account registration form)	String	Maximum of 65,535 characters
Article title (submission form)	String	Maximum of 65,535 characters
Article url (submision form)	String	Maximum of 65,535 characters
Article tags (submission form)	String	Maximum of 65,535 characters
Article picture url (submission form)	String	Optional field, maximum of 65,535 characters
Article review (submission form)	String	Maximum of 65,535 characters

Appendix A – Agreement Between Customer and Contractor

The customer agrees to a Robotics site that compiles relevant news and informational articles. Articles will be submitted by users of the site, though the team will research and attempt to include a web trawler if time permits. The site will also include search functionality through the use of tags (i.e. categories). Users of the site will also be able rate articles using an upvote/downvote system. The most popular articles and tags will be presented on the front page. The team will continue to implement these features in further development spirals.

Client

Name (signature): _____ Name (print): _____

Date: _____

Team

Name (signature): _____

Name (print): _____

Date: _____

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Appendix B – Team Review Sign-off

All members of the team have reviewed this document and agree on its content and format. Any minor disagreements are to be listed in the comments section below.

Name (signature): _____

Name (print): _____

Date: _____

Comments:_____
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Appendix C – Document Contributions

This document was completed by Kyle Sprankle and Chad Auld. Editing and review was conducted by all team members.