### **StudyHall**

#### **Requirements Document, version 1**

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### 1. Introduction

### 1.1. Purpose

The purpose of this document is to outline the major functionality of the StudyHall program, create a detailed list of required and tentative features of the site, and outline the functionality that needs to be present for the requirements to be considered "fulfilled."

### 1.2. Definitions/Acronyms/Abbreviations

- 1.2.1. <u>StudyHall</u> The overall program described in this document, including all of its features and dependencies (such as the database elements).
- 1.2.2. <u>Site</u> referring to the StudyHall program, but particularly the online user interface elements.
- 1.2.3. <u>Users</u> Any person who visits the site. May be guests, registered users, or admins.
- 1.2.4. <u>Site Visitors/Guests/Non-registered users</u> Users who visit the site but are not registered like registered-users or admins.
- 1.2.5. <u>Registered Users</u> Users who have registered with StudyHall and verified their account.
- 1.2.6. <u>Admins</u> Privileged registered users appointed by the StudyHall developers. Admins have access to administrative functionality of the site.
- 1.2.7. <u>Developers</u> Any and all individuals who had a part in the planning, coding, debugging, and production of StudyHall.
- 1.2.8. <u>Study materials/Test materials</u> Any text documents (.txt, .doc, .docx, or .pdf) uploaded by a general user or admin. Ideally these materials should be related to coursework from an educational facility such as a high school or university.
- 1.2.9. <u>Home Page</u> The starting page of StudyHall that users are directed to when they first access the site.

### 1.3. References

"830-1998 - IEEE Recommended Practice for Software Requirements Specifications." IEEE SA -. Software Engineering Standards Committee of the IEEE Computer Society, n.d. Web. 28 Sept. 2015.

<a href="http://standards.ieee.org/findstds/standard/830-1998.html">http://standards.ieee.org/findstds/standard/830-1998.html</a>.

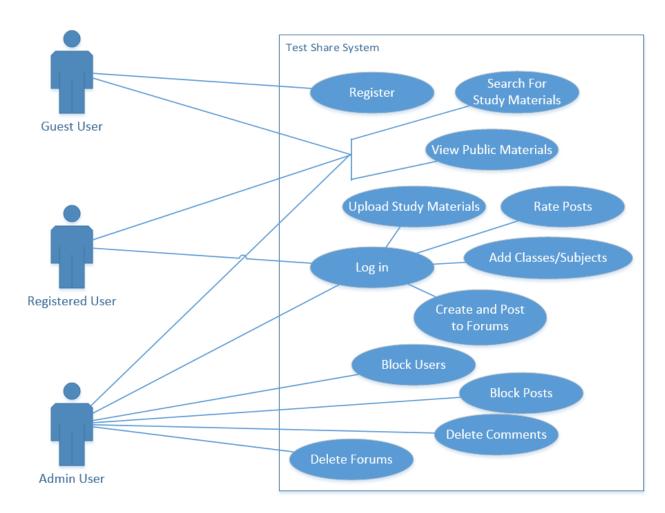
Crumpton, Joe, and Joe Cool. Joe's Discount Computers. N.p.: Richard Sween, n.d. PDF. Eriksson, Ulf. "Functional Requirements vs Non Functional Requirements." ReQtest RSS. N.p., 05 Apr. 2012. Web. 28 Sept. 2015. <a href="http://reqtest.com/requirements-blog/functional-vs-non-functional-requirements/">http://reqtest.com/requirements-blog/functional-vs-non-functional-requirements/</a>.

### 2. System Overview

### 2.1. Purpose

The study material sharing site will be a resource for site visitors to search for and access viewable text files of study materials. Searches will be able to find relevant study materials for users based on fields of class name, class subject, instructor, university, semester, and year of class. Site visitors are limited to searching and viewing documents, but registered users and admins are capable of doing everything that visitors can do, as well as capable of uploading study materials, creating new classes and universities, rating posts, creating forums, and posting to forums. On the whole the site should help connect users to resources that can aid them in their studies and allow them to upload study materials that can benefit other users.

### 2.2. Use Case Diagram



### 3. Specific Requirements

## 3.1. Site visitors/Guests can register an account on StudyHall. (Required)

#### 3.1.1. Description

Any site visitor is allowed to complete the registration process and create an account for themselves.

#### **3.1.2.** Actors

Guest

#### 3.1.3. Steps

- 1. Start at the home page.
- 2. Navigate to and click the "Login" link at the top of the page (alternately the "Register Now" Link in the page body.
- 3. Fill out all required fields to register.
- 4. Click the "Submit" Button.

## 3.2. Users can login and logout from every page. (Required)

#### 3.2.1. Description

For ease of accessibility, the login and logout buttons will be displayed in a visible location on every page.

#### **3.2.2.** Actors

Guest

Registered User

Admin

#### 3.2.3. Steps

- 1. Start at any page that is a part of the StudyHall website.
- 2. Navigate to the navigation bar at the top of every page.
- 3. If you are not logged in, click the "Login" button, enter your login information, and click "Submit"
- 4. If you are logged in already, click the "Logout" button.

## 3.3. All registered users can upload study materials. (Required)

#### 3.3.1. Description

To discourage pointless or thoughtless submissions of a joking or malicious nature, uploading materials will be restricted to registered users. This way users who post only jokingly can be held accountable (blocked).

#### **3.3.2.** Actors

Registered User Admin

#### 3.3.3. Steps

- 1. Start at the home page.
- 2. Navigate to the "Upload" button and click it.
- 3. Use the "browse" button to upload a document.
- 4. Enter all required information fields.
- 5. Click the "submit" button.

## 3.4. All users can search for study material submissions. (Required)

#### 3.4.1. Description

The ability to search for and view study materials is one of the core functionalities of StudyHall. There should be no restrictions or privileges to document access and viewing.

#### **3.4.2.** Actors

Guest Registered User Admin

#### 3.4.3. Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the "Search" bar at the top of the page and select a class name, class type, year, or semester.
- 3. Press "Enter."

## 3.5. All users can access class materials through the A-Z Class List link. (Required)

#### 3.5.1. Description

The A-Z Class List feature lists out every class registered in StudyHall in Alphabetical order. Clicking on the link for a class takes you to all study materials uploaded for that class.

#### **3.5.2.** Actors

Guest

Registered User

Admin

#### 3.5.3. Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the left side of the page and click on the "A-Z Class List" link.
- 3. Click on the link for any class to see what study materials are available.

## 3.6. All users can access classes and class materials through the Subjects link. (Required)

#### 3.6.1. Description

The "Subjects" link brings the user to a page where all subjects registered with StudyHall are displayed. Each subject displayed doubles as a link that when clicked will bring the user to a page with all classes associate with that subject listed. Subject examples: Math, Computer Science, English, Chemical Engineering, Kinesiology, etc.

#### 3.6.2. Actors

Guest

Registered User

Admin

#### 3.6.3. Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the left side of the page and click on the "Subjects" link.
- 3. Click the link for any Subject to see what classes there are for that subject.
- 4. Click on the link of any class to see what study materials are available for that class.

## 3.7. StudyHall includes a forum that registered users can access. (Required)

#### 3.7.1. Description

The forum feature has various topics that can be created by registered users and allows for discussion of study-related topics.

#### **3.7.2.** Actors

Registered Users Admins

#### **3.7.3.** Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the left side of the page and click on the "Forums" link.
- 3. Click on the link for any forum topic listed to view forum posts.

## 3.8. A registered user can start a new forum topic. (Required)

#### 3.8.1. Description

New forum topics can be added to by registered users and will be displayed in the "Forums" section of the StudyHall website when other registered users view that section.

#### **3.8.2.** Actors

Registered User Admin

#### 3.8.3. Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the left side of the page and click on the "Forums" link.
- 3. Click the "New Topic" button at the top of the Forums directory.
- 4. Fill out all required fields to start a new forum.
- 5. Click the "Create" button at the bottom of the form.

## 3.9. A registered user can comment on a forum. (Required)

#### 3.9.1. Description

A registered user can comment on any existing forum topic and participate in any study-related group discussions.

#### **3.9.2.** Actors

Registered User Admin

#### **3.9.3.** Steps

- 1. Start on any page of StudyHall.
- 2. Navigate to the left side of the page and click on the "Forums" link.
- 3. Click on an existing topic where you want to comment on.
- 4. Fill in your comment in the textarea and click on "Submit" to submit your comment.

### 3.10. An admin can block users. (Required)

#### 3.10.1. Description

In the event that registered users are behaving inappropriately, admin users can censor them.

#### 3.10.2. Actors

Admin

#### 3.10.3. Steps

- 1. Navigate to a page where the user to block has posted.
- 2. Click the user's username link.
- 3. On the user's information page, click the "Block User" button.

## 3.11. An admin user can block/delete uploaded materials. (Required)

#### 3.11.1. Description

In the event that uploaded materials are inappropriate or explicit, admin users can censor them.

#### 3.11.2. Actors

Admin

#### 3.11.3. Steps

- 1. Navigate to the inappropriate content page.
- 2. Navigate under the document and find the "block" icon.
- 3. Click on the "block" icon.

## 3.12. A user must verify their email address before they can be considered a registered user. (Medium)

#### 3.12.1. Description

Before a user can access the functionalities of a registered user, he or she must visit the link provided as a mail to verify and activate the account. This is to ensure that a user has not used a fraudulent email address to sign up for the website.

#### 3.12.2. Actors

Guest

#### **3.12.3.** Steps

- 1. Go through the registration steps in 3.1.3.
- 2. Navigate to your email service and click on the "StudyHall Registration" email.
- 3. Find the confirmation link in the email and click on it.

### 4. Nonfunctional Requirements

## 4.1. There should be at least 3 different types of users: guests, registered users, and admins. (Required)

#### 4.1.1. Description

The three types of users determine the types of privileges that will be available. These users categories form a layered privilege/access model where all users have guest privileges, registered users and admins have registered user privileges, and only admins have admin privileges.

## 4.2. The system should have a way of storing materials uploaded by users. (Required)

#### 4.2.1. Description

StudyHall will interact with a remote server to hold not only the user information but also uploaded documents, comments, forum posts, upload ratings, etc.

## 4.3. An admin user can perform every operation performed by all other users. (Required)

#### 4.3.1. Description

In addition to admin privileges, admin users can perform all operations performed by non-users (guests) and registered users.

## 4.4. All users should have an @msstate.edu email address. (Medium)

#### 4.4.1. Description

Users should use a @msstate.edu email address when registering. This is to ensure that only students affiliated with the university are able to sign up to StudyHall. If the user tries to register with a non-university email, the registration process will fail.

### 4.5. The system offers privacy protection. (Medium)

#### 4.5.1. Description

Documents often have information about the author that may include sensitive personal information. Therefore, when documents are loaded to StudyHall, all personal information included in the document tagging will be erased.

### 4.6. A class cannot be added without uploading study materials. (Medium)

#### 4.6.1. Description

When the user is adding a class, they must also upload a study material document and fill out required fields for that document as they would have to do in Section 3.3.3. If the study materials are not uploaded, the class will not be added.

### 4.7. A class cannot be duplicated. (Required)

#### 4.7.1. Description

If the class a user tries to register matches exactly the name, subject, year, and semester of another class, the duplicate class will not be added and the user will be informed with an error message of the duplication.

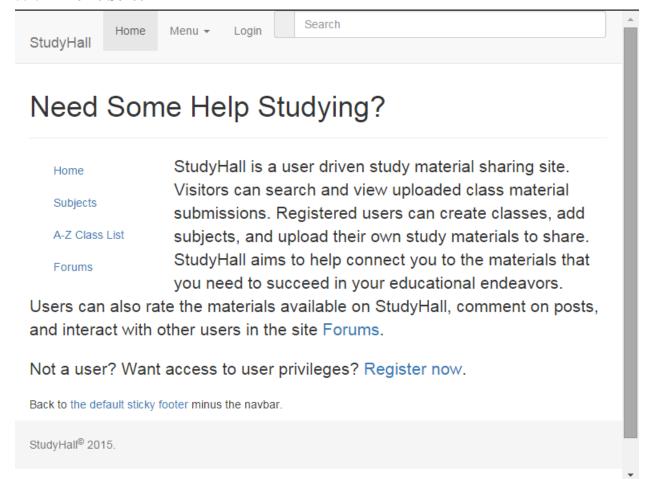
## 4.8. An admin cannot block more than 20 users within a 24-hour period. (Medium)

#### 4.8.1. Description

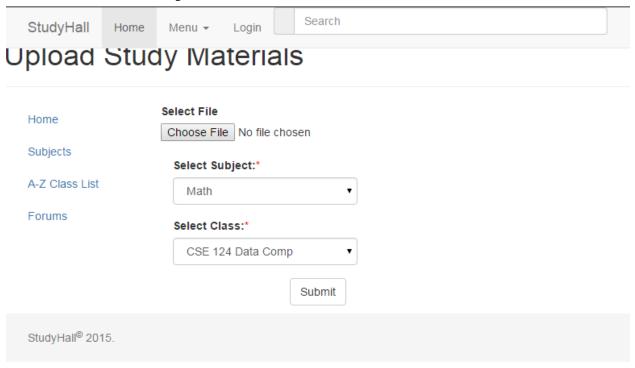
When an admin blocks a user after 24 hours of not blocking a user, a 24-hour timer will start. The number of users blocked over this time period will be recorded, and after the 20th user, the admin will not be able to block anymore users before the 24-hours is over.

### 5. Appendix A: User Interface

#### 5.1. Home Screen



#### 5.2. User Document Upload



# 6. Appendix B: Initial Task and Role Assignments

#### **6.1.** Presentation Assignments

- Requirements Review Kristen Massey
- Design Review- Armand Nokbak
- Final Review Siddhant Sutar and Jesse Ables

#### **6.2.** <u>Initial Task Assignments</u>

- Database Kristen Massey
- User Interface Siddhant Sutar
- User Functionality Armand Nokbak
- Document Handling/Processing Jesse Ables