

eChits

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IT350 Final Project  
4 DEC 17

Extra credit: None

Innovative Feature: Write to properly formatted pdf

1. Team responsibilities/roles
  - a. Scott Mayer - Team leader
    - i. Ability to view all chits, view a chit, file structure, and approve/disapprove
    - ii. viewchits.php, viewchit.php, nimitz.php
  - b. Doug Alpuche - Quality control
    - i. Print as PDF
    - ii. filtering
  - c. Vincent Xu - Interface
    - i. Login/registration interface
    - ii. Ability to edit chits
  - d. Ryan Eilers - Appearance
    - i. Username and form validation
    - ii. Project Report

2. Users
  - a. Admin
    - i. User: inst
    - ii. Pass: goit
  - b. Non-admin 1
    - i. User: m210001
    - ii. Pass: asdf
  - c. Non-admin 2:
    - i. User: m180003
    - ii. Pass: asdf
  - d. Non-admin 3:
    - i. User: egarcia
    - ii. Pass: asdf

3. Design, HCI, Accessibility principles

We wanted a very simple interface, so we settled on a basic navbar with search field and buttons to move around the website. All pages have a redirect to the login page, but once you are logged in, you're greeted with your user page which contains a list of all the chit's you've made and the chits waiting for your approval. Each of these buttons takes you to a new page focused around that task. We also have links to our contact pages.

We used bootstrap make our website, which has interactive buttons and form fields. One of the features to note is the 'required' tag on the necessary inputs which provides a safety net for validating our user input. We have provided user feedback after every significant button press. In particular we require a double confirmation to delete a chit. This is intended to prevent accidental removal of their chits.

#### 4. Technical Report

- a. User Actions
  - i. Logon
  - ii. Make Chit
  - iii. Edit Chit
  - iv. Delete Chit
  - v. Approve Chit
  - vi. Print Chit as PDF
  - vii. Search for a specific chit
- b. Upon first visiting any page, the server checks to see if the user is logged on, if they are not then the user is redirected to a login page
- c. After a user is logged on, our server scripts read through our directory.txt file for any chits that the user owns, and any chits that they have yet to approve/disapprove for their subordinates. These are displayed in an easy to read table. Users can edit their own chits from here, print approved chits, and approve/disapprove subordinate chits from easy to identify buttons. If there are no subordinate chits, the second table is not shown.
- d. Filtering is accomplished via a one line description when the users submits the form initially. Filtering looks for strings in that description and if filtering is applied, only shows matching chits.
- e. Each entry in directory.txt is in the following format:
  - i. owner\_uname, filename, coc1-0 coc2-0 coc3-0, 0, description
  - ii. The -0 indicates approval status. Coc indicates the username of the next member of the Chain of Command. 0 is pending, 1 is approved, 2 is disapproved. The final 0 indicates the overall status of the chit.
- f. Each chit is stored in its own file, named owneruname\_chit00X.txt. This is the filename stored in the directory.txt file so that it can be found by the server. The file is a serialized array. The server reads it in, deserializes it, and displays it in the proper format. Fields can be edited, which writes writes the array back into the same file and resets all of the approvals currently collected.
- g. Make Chit
  - i. The visual format was accomplished with many divs and CSS
  - ii. This form has multiple 'required' tags on necessary inputs to provide a level of validation
  - iii. After clicking submit our PHP script checks to make sure every POST variable is populated and checks to make sure every username submitted is actually a user
    - 1. This check is accomplished by searching the user file for the given username
  - iv. After successful submission, page redirects to a Read-Only version of the chit