

**Homework 2**  
**Evaluation of GMU SIS (Patriot Web)**  
**Fall 2007**

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**SWE 432**

**Design and Implementation of Software for the Web**

**“Make everything as simple as possible, but not simpler”**

**– Albert Einstein**

# Summary

- Student view differs from faculty view
- This evaluation is based on the faculty view
- Patriotweb is a “web-enabled legacy system”
  - There was an old system based on an ancient database
  - A company was hired to add a web interface
  - No changes to the underlying DB or software
  - Existing queries were used, without changing or adding

**Avoid “web-enabled” projects at all costs!!!**

# Criteria (Mine)

<u>Criteria</u>	<u>Priority</u>	<u>Goals</u>	<u>Achieves</u>
Learn	2	High	Moderate
Speed	1	V. High	Low
Errors	4	Moderate	Low
Retention	3	High	Moderate
SS	5	Low	Low

**For me, this UI fails on 4 of 5 criteria**

# Splash Screen

- Splash screen (<https://patriotweb.gmu.edu/>) has no useful purpose
- Login screen ([https://patriotweb.gmu.edu/pls/prod/twbkwbis.P\\_WWWLogin](https://patriotweb.gmu.edu/pls/prod/twbkwbis.P_WWWLogin)) is simply a tiny form – on a big screen
- Splash screen and login screen should be merged
- An entire screen just to login slows the user down
  - No benefit to any other criterion

## Always Remember

- Some sites (Yahoo Mail, Hotmail, banking sites, and patriotweb) instruct the browser to never allow your password manager to retain your information
- If you use a shared computer, this will increase security
- If you are the sole user of your computer, then it takes unnecessary time
- “Always Remember” is a Mozilla Firefox extension that instructs your browser to ignore the web site’s instructions to not save passwords
- <http://roachfiend.com/archives/2005/03/03/always-remember-password/>
  - Must restart Firefox
  - Conflicts with mail.gmu.edu

# Main Screen

- Main screen is a 4-item menu – with lots of useless junk
- The menu appears twice
- The order of items on the top is different from the list in the middle
- The choice labels are not clear
- The descriptions are very confusing
- The colors are nonstandard – not obvious what is “clickable”

# User Analysis

What are the most common functions that faculty use?

1. Getting rosters
2. Assigning grades
3. Getting pay stubs

# 1. Getting Pay Stubs

- Not under Financial Information
- After much searching – under Employee Services
- To get to pay stub:
  1. Splash screen
  2. Login screen
  3. Menu screen (no title)
  4. Choose “Employee Services”
    - Note the order of this menu ... most common item is pay stub
    - I don't even have “time off”
  5. Choose “Pay Information” (fifth entry)
    - Another 4-item menu .. not clear ...

# 1. Getting Pay Stubs (*cont*)

6. Choose “Pay Stub” (third entry!)
7. Choose a year from a drop-down
  1. Should be combined with previous screen
  2. Should default to current without making an explicit choice
  3. Four choices - should be a radio box
  4. Must explicitly choose, THEN click “Display”
8. Another menu of up to 24 items!
9. Choose item on top of the list

# 1. Getting Pay Stubs (*summary*)

- Total of 9 screens, 1 or 2 clicks per screen
- Better design
  - Merge splash and login (screens 1 & 2)
  - Merge menu 3 & 5, using javascript for submenu
  - At step 6, show the current pay stub and add menus for other options
  - (9 steps becomes 3)

**I don't even bother looking at my pay stubs anymore**

...

**I just look at my bank deposits**

## 2. Getting a Class Roster

- “Faculty & Advisor Services”
  - Order of menu is wrong – this should be first
  - “View the Terms ...” should definitely not be first
- Terminology:
  - What is “CRN” ?
    - “Summary” versus “Detail” ?
  - Four items (“Detail Class List”, “Summary Class List”, “Detail Wait List”, “Summary Wait List”) sound a lot alike
- “Final Grades” should be “Enter Final Grades”

## 2. Getting a Class Roster (*cont*)

- “Detail class list” shows contact info for each student
  - Most of the time we want “Summary”
- “Summary Class List” screen
  - NO USEFUL INFORMATION without scrolling - wasted space & time
  - Irrelevant information:
    - ID
    - Reg Status
    - Level
    - Credits
    - Midterm
    - Final
    - Grade Detail
  - Missing useful information: **Email!**

## 2. Getting a Class Roster (*cont*)

- A useful functionality would be to either copy and paste or save the names into a spreadsheet
  - This is very inconvenient with the UI
  - I copied and pasted the entire page into a text editor, deleted extra information, then copied again to my spreadsheet
- Getting email addresses?
  1. Scroll to bottom of the page
  2. Click on “Display Email List”
  3. It's not displayed! Is this an error?
  4. Scroll down to the bottom - a textbox with a comma separated list of email addresses!
    - Alternate formats would be a clickable email link, a new column
    - Not convenient to associate names with emails
    - Why not include email as a default?
- “Return to previous” goes back to non-email screen ...
- “Return to previous” again goes back to screen with email ... a loop!

## 3. Entering Grades

- “Select Term” screen
  - Should not use an entire screen
  - Drop down for 5 elements should be a radio box
  - Should default to current without making an explicit choice
- “Select a CRN” screen
  - Should not use an entire screen
  - Dropdown for 7 elements should be a radio box
  - Should default to most recent without making an explicit choice
- On the **third screen**: The “Final Grade Worksheet” is **unavailable**
- No return to “Faculty & Advisor Services”, only “back”

### 3. Entering Grades – Violations

- Tell users when choices are not available immediately
  - The “Faculty & Advisor Services” screen should make “Final Grades” unavailable
- CRN and Select Term screens set “state” in the UI
  - These should be set in radio buttons or click-boxes, not in a separate-screen menu
- Should be merged with the “Faculty & Advisor Services” screen

# Conclusions

- Programmers obviously did not consider users, user needs, or usability principles
- Ultimate in “**inside out**” approach – the internals of the system existed for many years
- Entering grades requires manipulating a **pull-down** for each student – **slow** and **error-prone**
- The old paper system was faster, easier to learn, had fewer errors, was easier to remember semester to semester, and was much less annoying...