A Collection of Small Software Tools for Web and Email

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VSU Math Tech − Feb 27, 2004

Outline

- **Email**

  - ★ **Explain the small email tools**
  - ★ **Compare it to existing tools**
  - ★ **tools for building elist**

- **Gradebook**

  - ★ **new gradebook tools – authenication**

Sending Email to a class

- Unix/Linux/Mac OS X, or cygwin on windows

- Cd to the class email subdirectory

- Edit the ascii file 'enote'

- Use the command './mailit'

- There is a variant which sends an attachment

The code – a short script

```sh
#!/bin/sh
while read email name
do
    echo "Hello  $name" > xx
    cat enote >> xx
    /usr/bin/mailx -s "Cal3 Email" $email < xx
done < elist
```

elist: The list of email addresses

- ascii file with the format:

  `<email>`␣`<name:first`␣`[middle]`␣`last>`

- Example

  ```
  bellenot Steven Bellenot
  xyz05c Xray Yankee Zebra
  ...
  ```

- To add or delete a student, edit the file

- elist never disappears, you can email an old class

Other methods commonly used at FSU #1
Class email alias

- Request the alias (via a web page)

- Mail send to MAC-2313-04@fsu.edu gets copied to everyone

- Alias updated nightly

- Alias disappears at the end of a semester

- Alias use to attract SPAM, even from colleagues (now restricted to you and the students)

Other methods commonly used at FSU #2
Web toolkit − part of class photo roster

- Log on via the web − roughly half a dozen pages.

- Click on send mail, fill out web based form.

- Cut 'n paste but no attachments

- Email addresses are hidden, but Updated in real time?

- Colleagues can't spam, but advisors can.

- Deleted after two semesters.

Other methods commonly used at FSU #3
campus.fsu.edu – Blackboard

- Blackboard is popular commercial monolithic online course delivery program

- Fast changing program, my comments are dated

- Click on send mail, fill out web based form, no attachments

- Courses deleted after a semester

Helper tools for making elist #1
Student names to email addresses

```
while read ssn last first tail
do
    echo $last
    finger $last | grep -i $first
done < <file with names>
```

- Not perfect: John A Doe and John B Doe

- Not perfect: last names with a space

- Not perfect: not every one has email address

Helper tools for making elist #2
First Cap

- All caps student database (very old system)

- Quick convert to lower case, but with all first letters in caps

- Not perfect: MacIntosh is Macintosh

- Not perfect: John Doe III is John Doe Iii

- Not perfect: Amy von Baum is Amy Von Baum

Grade Book improvements

- Each students has unique magic code like Xyzzy and their copy of the grade book at http:<somewhere>/magic-code.html

- Magic code dispenser which authenticates the student and emails their URL (It is web based)

- It is careful with ssn – asks for name and number

- controled by ascii file:
  ssn email code full-name (first [middle] last)

- more tools for building this control file.

Why bother?

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- **Philosophy** Agile small programs vs Monolithic central programs

- **Grude** Control vs Once (or twice or ...) bitten, twice shy

- **Nailing Jello to a tree** The evolution of software

- It is a different kind of **bother**

Why bother?

Nailing Jello to a tree The evolution of software

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Nailing Jello to a tree The evolution of software

- **Local files remain, monolithic files disappear**
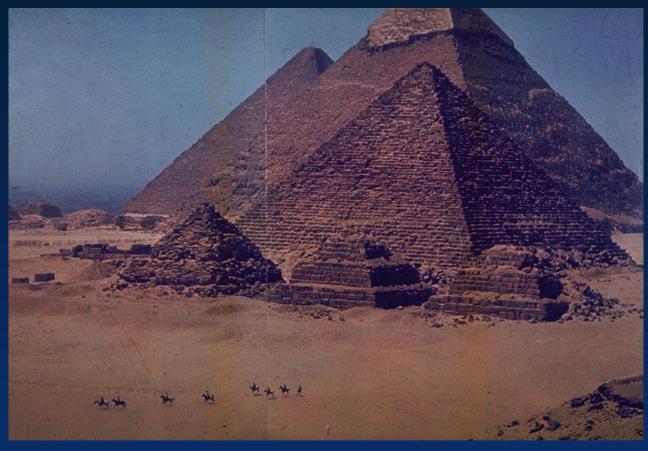
Why bother?

Nailing Jello to a tree **The evolution of software**

- **Local files remain, monolithic files disappear**

- **Local programs remain, monolithic program change and often don't work with older data**

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Nailing Jello to a tree The evolution of software

- **Local files remain, monolithic files disappear**

- **Local programs remain, monolithic program change and often don't work with older data**

- **Local files are locally fixable, monolithic programs require a hierachy of support levels**

Small is Beautiful

This is beautiful but functions only as a landmark

Small is Beautiful

There is a book, first published in 1973 with the name. Small Is Beautiful : Economics as if People Mattered. There are several advantages to small:

- Easier to learn.

- More adaptable.

- Local control.

- Can split into pieces.

Molithic Construction effort?

A blade of grass doesn't fit between the stones

What was this designed for?

Fate of Monolithic Programs?