Which direction should we go?
Student Cell Phone Usage

- Results from Fall 2009 student technology survey
  - 97% own a cell phone
  - 91% use text messaging
  - 47% have a data plan
- 90% of future enrolled students have their cell phone numbers recorded in SAP
Percentage of Employees with Cell Phone Number Recorded in SAP by EEO Category (May 2010)

<table>
<thead>
<tr>
<th>EEO Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEO 1 (Exec/Managerial)</td>
<td>78.57%</td>
</tr>
<tr>
<td>EEO 2 (Faculty)</td>
<td>29.95%</td>
</tr>
<tr>
<td>EEO 3 (Professional Non-Faculty)</td>
<td>50.16%</td>
</tr>
<tr>
<td>EEO 4 (Clerical/Secretarial)</td>
<td>62.50%</td>
</tr>
<tr>
<td>EEO 5 (Technical/Paraprofessional)</td>
<td>42.28%</td>
</tr>
<tr>
<td>EEO 6 (Skilled Crafts)</td>
<td>32.05%</td>
</tr>
<tr>
<td>EEO 7 (Service/Maintenance)</td>
<td>29.37%</td>
</tr>
<tr>
<td>Total</td>
<td>41.86%</td>
</tr>
</tbody>
</table>
Fall 2009 Student Technology Survey
Cell Phone Type

- iPhone: 20%
- Blackberry: 17%
- Basic Cell Phone: 54%
- PDA with Windows Mobile: 4%
- Other: 5%

Total: 100%
Device-Agnostic

adj. Of, or relating to, a software program or other system that is not dedicated to a single hardware platform, but instead is flexible enough to work with any device.

(from http://www.wordspy.com/)
Employee and Student Cell Phone Provider
May 2010

At&T 53%
CellSouth 19%
Verizon 15%
Sprint PCS 5%
Tmobile 6%
US Cellular 0%
Cricket 0%
Other 1%
AllTell 1%
AT&T Cell Service in Oxford

- Problem Areas
  - Woodland Hills including the stretch of Highway 7 just north of Highway 30
  - Old mall area
  - Hospital area
- Game Day Service

- Progress
  - COW just installed in old mall
  - Tower planned for Hwy 7 & Hwy 30 for 7/10
  - Other towers planned for this calendar year
  - DAS …
**Distributed Antennae System**

- Network of small antennae connected with fiber.
- Improves any participating cell vendor’s campus signal strength and capacity.
- Smaller antenna cells prevent need for larger “macro” cells.
- Better overall cell service for the campus.

- Can be mounted on
  - Utility poles
  - Traffic signals
  - Street lights
  - Telephone poles
  - Buildings

- Target “Go Live”
  - First home football game (9/4)
Text Messaging

Current 3 year contract is for emergency use only
- Expires in December 2010
- Example uses
  - Tornado warnings
  - Power outages
  - Internet / telephone outages
  - Graduation relocation

How it works

RFP in progress now with several options
- Emergency text messaging
- Non-emergency text messaging
- Two-way text messaging
- SOAP API for dynamic messaging
  - From SAP processes
  - From myOleMiss
Student Feedback on Mobile Apps

- **The Big Three**
  - myOleMiss
  - WebMail
  - Blackboard
    - Access from iPad
    - Licensing issues

- **Other**
  - I like my phone to be a phone and that's about it.
  - I do NOT want the university communicating with me through my cell phone.
  - Need better coverage in the residential college.
  - None, you should not be on the phone during class. But maybe a campus map where you can enter your schedule then it will give you a walking route from class.
More Feedback ...

- Twitter to tell about cool events
- Cell phone service on bottom floor of J.D. Williams Library
- Parking spot locator
- Campus events calendar
- Office applications (Word, Excel)
- Class schedules
- Grades
- Ole Miss sports updates
- Class cancellations
- Reminders about academic advising
- Angel
- Campus directory
- Campus map with current parking lot availability
- GPS to campus buildings
- Bursar account balance
- Web registration
- Library catalog
  - Especially new feature on the library's website that gives virtual directions to where a book is located
- IT alerts
- Weather alerts
- Game day stats coverage
- Voting in student elections
- Turner center hours and group fitness class schedule
- Campus dining meal specials
- Check price of books and whether they are required for class
- University news application
- On-campus weather
- Epocrates free of charge for Pharmacy students
- Teacher lecture podcast
- Daily Mississippian
- Use my cell phone as a clicker
- Assignments
- Road closures
- Parking location map
- Lexicomp
- Rebel Radio App
Mobile Computing Strategy

- Address campus infrastructure issues
- Expand usage of text messaging
- Deliver first round of myOleMiss and other mobile applications via HTML
- Explore SAP’s Netweaver Mobile middleware for the development of native applications

UM Domain

www.olemiss.edu
Considerations

Device Variety

- No universal experience
- No preferred experience
  (“This page best viewed using Android?”)
- Yet it is possible to channel experiences into similar groups:
  - Full capability
  - Limited capability
  - Targeted to device
Considerations

Input

- Track ball, telephone keypad, small keyboard, stylus, touch screen
- Hard to enter punctuation ;)
- Hard to enter long URIs
  http://events.olemiss.edu/events/index.php?com=detail&eID=396
- Spotty support for “back” and other features
Considerations

Bandwidth and Cost

- Mobile networks are often slower
- Data plans cost money
- Some retrieved content may be useless (PDFs, some wide tables)
- Image file size matters
Considerations

User Needs

- Based on user’s location or activity (at rest, making plans, travelling)
- Practicality of content offered (need to refer to multiple windows)
- Convenience
- Content (concise, with expanded version available)
Considerations

Browser Limitations

- Fancy menus
- Client side scripting (Javascript)
- Plugins and Adobe Flash animation
- Background and transparent images
Considerations

Terms

- **Keyboard**
  (touch screen, keypad, phone buttons)

- **Mouse**
  (fingertip, touchpad, tab key, stylus, trackwheel)

- **Click**
  (tap, tab and select, click the trackwheel, …)

- **Right-click**
  (not usually implemented)
Considerations

Advantages
- Personal, portable, and connected
- Location awareness
- Always “on”
- Universal alerting device
- Camera + my thoughts ➔ Web
- Oh yeah, it also makes phone calls
UM Domains

www.olemiss.edu

m.olemiss.edu
Specific Example

Plain HTML with CSS and Javascript

<ul class="pageitem">
<li class="textbox">UM Web for mobile devices</li>
<li class="menu"><a href="http://news.olemiss.edu"> <img alt="news" src="images/thumbs/uml</li>
<li class="menu"><a href="http://events.olemiss.edu/events" > <img alt="calendar" src="imag</li>
<li class="menu"><a href="http://xhtml.weather.com/xhtml/cc/38677"> <img alt="weather" src=""</li>
<li class="menu"><a href="http://maps.google.com/maps/m?dc=gorganic#ll=34.367623,-89.534</li>
<li class="menu"><a href="http://www.olemiss.edu/itunesupublic"> <img alt="iTunes U" src="im</li>
<li class="menu"><a href="https://webmail.olemiss.edu:7443/surgeweb?cmd=logout,show&pag</li>
<li class="menu"><a href="contact.html"> <img alt="contact" src="images/thumbs/telephone.png" /></li>
<li class="menu"><a href="band.html"> <img alt="music" src="images/thumbs/music.png" /></li>
</ul>
Current plans

- Separate top-level mobile Web site
  - Shorter URL: m.olemiss.edu
  - Limited, targeted content for mobile user
  - Common “device agnostic” experience where possible
    (same links, though possibly different styles)
  - Richer “device specific” experience only as needed
    (iTunes links, location-aware features)

- Train secondary content providers
Mobile Offerings

- Today
  - Webmail
  - Calendar
  - Any flat text

- Easy additions
  - Weather
  - Links to existing mobile-ready sites

- Requested
  - Faculty/Staff directory
  - Web directory
  - Course listing
  - View grades
  - View paystubs
  - Pay account
  - Anything currently available in myOleMiss
Discussion!
Your own Mobile Site

Things we won't consider in this exercise:

- Switching between full and mobile sites
- Styling for non-iPhones
- Any real content… this is just for practice
Your own Mobile Site

1. In Dreamweaver, create a "mobi" folder in your site's home directory.

2. Create two new blank HTML pages named "index.html" and "contact.html" and save them to that folder.
Your own Mobile Site

3. Go to www.olemiss.edu/webmaster/mobi and view/copy the source code. Paste it into your index.html file and save it.

4. Do the same with the Contact page.
Your own Mobile Site

5. Edit contact.html with your information. Save/Upload.

6. Create two more links in index.html.
   - Programs
   - Organizations

7. Create pages for those links based on contact.html and add some content.