Midterm Results

- Average: 34 (53%)
- Std Dev: 9
- Max Possible: 64
- High: 46 (72%)
- Low: 19 (30%)
Other Wireless Solutions

- Wireless Application Protocol (WAP)
  - TCP developed mostly over wired connections
    - Argued that other protocols are needed
      - When bandwidth is expensive
        - TCP is too chatty
WAP stack

- Application
- Presentation
- Session
- Transport
- Network
- Data Link
- Hardware
- Bearer
- Network

WAE
WSP
WTP
UDP
IP
Bearer
Network
WAP stack elements

- WDP - Wireless Datagram Protocol-like UDP
- WTLS - W Transport Layer Security
  - Similar to RFC-2246
- WTP - wireless Transport Protocol
  - non-reliable one-way, reliable one-way, reliable two way
- WSP - Wireless Session Protocol
  - Datagram and VC
- WAE - Wireless Application Environment
Cell Phones and WAP

- XML
- WML an XML derivative
  - `<!DOCTYPE wml PUBLIC “-//WAPFORUM//DTD WML 1.1//EN”`
- Java Servlet (JSDK)
- WML script
  - Client, e.g. phone, execution
WML hello world

- `<wml>`
  - `<card>`
    - `<p>` Hello World. `</p>`
  - `</card>`
- `</wml>`
  - Softkeys
ARP

- IP addr to Ethernet address mapping
  - ARP request
  - Proxy ARP
  - Static ARP
  - Reverse ARP
Domain Name System (DNS)

- Replaced “hosts.txt” file
- Name-number-name mapping
  - Hierarchy
    - Full specification or default host
  - Caching
  - Reverse lookups
IP Mobility

- Application level mobility
  - Home and Foreign agents
    - Mobitext network
- Link Level Mobility
  - CDPD, Mobitext
  - 802.11b
- Host address routing
  - Routing uses longest prefix
  - Host based routing can work