Simple Development Cycle
(part 1)
Simple Development Cycle
(part 1)

Write/Edit Program Source Code (HTML?)

Design Solution

Identify Problem

View Page

Errors?

Yes

No, Yes

Move to server

Execution Errors?

Yes

No

Done

Client ↔ Server

cunix ↔ cunix

“local” PC ↔ cunix

Client ↔ Server
Simple Development Cycle
(part 2)

1. Browser makes a request based on URL
2. URL “points” to a particular server and a particular resource (i.e. webpage)
3. Server finds page, checks permissions, and “sends” the resource.
4. The browser receives the page and processes/renders it based on the HTML.

Client

Server

Internet

1

2

3

4
Simple Development Cycle (part 3)

1. Identify Problem
2. Design Solution
3. Write/Edit Program Source Code
4. Compile Program
   - If Compile Errors?, Yes → Identify Problem
   - If Compile Errors?, No → Run Program
5. Run Program
   - If Execution Errors?, Yes → Identify Problem
   - If Execution Errors?, No → Done

Test and Submit
Simple Development Cycle (part 3)

1. Identify Problem
2. Design Solution
3. Write/Edit Program Source Code
   - Compile Program
     - Compile Errors?
       - Yes
       - javac
     - No, Run Program
       - Execution Errors?
         - Yes
         - java
         - javac
         - vim, IDEs, etc.
         - pico, emacs, etc.
       - No
         - Done

Test and Submit
Simple Development Cycle (part 3)

1. Identify Problem
2. Design Solution
3. Write/Edit Program Source Code
4. Compile Program
   - Compile Errors?
     - Yes:
       - Identify Problem
       - Design Solution
     - No, Run Program
   - No, Run Program
5. Execution Errors?
   - Yes:
     - Identify Problem
     - Design Solution
   - No: Done

Tools:
- pico, emacs, vim, IDEs, etc.
- javac
- java

Test and Submit
Give Directions (an algorithm):
Subway ride from Columbia to Times Square!

- for a tourist.

- for a long-time resident.

- others?