PHP:

    Server-side scripting

    embedded within HTML

    Client never sees PHP code
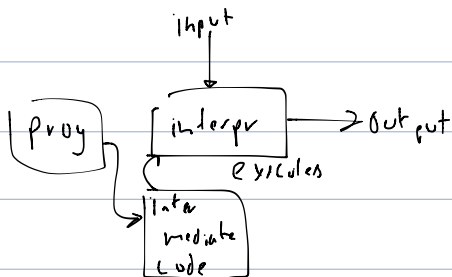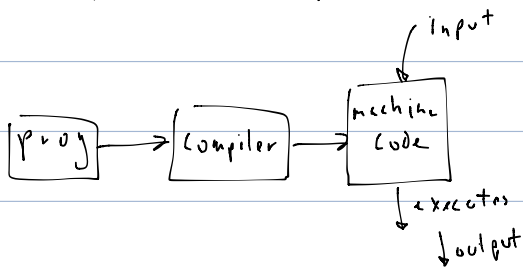
    HUGE language

Content management systems written in PHP

PHP program structure

    not alot of requirements

PHP interpretter parses entire file

interpretter vs. compiler

```
                              ┌ Input
                              ↓
 ┌──────┐      ┌──────────┐   ┌──────────┐
 │ prog │ ───→ │ Compiler │──→│ machine  │
 └──────┘      └──────────┘   │ code     │
                              └──────────┘
                                   │ executes
                                   ↓
                                   ↓ output
```

```
            input
              ↓
 ┌──────┐   ┌──────────┐  ─→ output
 │ Prog │   │ interpr  │ ──→
 └──────┘   └──────────┘
              e ycycles
           ┌──────────┐
           │ Inter    │
           │ mediate  │
           │ code     │
           └──────────┘
```

Anything within PHP delimiter tags is interpretted

<?php ..... ?>

<script language="PHP"> ... </script>

 = new line

write in another file and include it

Types in PHP
  - boolean — TRUE or FALSE
  - integer — Platform dependent
  - float —
  - string — single-quote vs. double
    " ... " = interpolated into the string

PHP implicitly casts string/integer when appropriate

variables/ begin with $, can have _ after
  $x = ~;
  $abc = ~;
dynamically typed (no declaration)
    BOUND or UNBOUND
  implications
    - no "type clash" errors
  $x = $x . "dollars" (concatenate)

gettype() returns variables type
is_<type?>() returns boolean

Comments

/* ...... */ multiline

// ..... single

.... single

predefined variables
  $_SERVER
  $_POST   } always
  $_COOKIE

"\$var" = $var (string)
 "$var" = ——— (contet)
 '$var' = $var (string)
var_dump($var) ?
if (___)
  ⋮

else
  ⋮

PHP is always floating point division
PHP string value = 0, True
   "0" = False

=== returns true if same value AND same type
!== true if values differ in value OR type

if, while, do, for, switch

Open with : rather than {

Close with endif, endwhile, endfor, end switch