

### Administrivia

- Homework 8 is being revised. The old version is now called Homework 8x and is optional. The new version will be on the Web soon and due next Monday.

Slide 1

### User-Defined Types in C — `structs`

- `struct` provides a way to define a “type” with fields.
- Example from last time — US money. (Finish code.)
- Since each `struct` is a type, can have arrays of a `struct` type. Simple example next time.

Slide 2

### User-Defined Types in C — `union`

- For completeness we should mention that C also provides a way of defining a structure that can contain one of several alternatives (“this OR that”, as opposed to the “this AND that” of `struct`) — `union`.
- See discussion in textbook about this; it can be useful, but can also make code more difficult to understand.

Slide 3

### User-Defined Types and Library Code

- Library code often makes use of “opaque” types (e.g., `FILE`).
- Implementing this often involves separating functionality into interface (`.h` file containing type definitions, function declarations) and implementation (`.c` file containing function definitions — much as in our “US money” example).

Slide 4

### Minute Essay

- If you missed the second problem on the quiz — why? I thought this would be a fairly easy problem if you completed the second problem on Homework 7, but apparently not?
- How much progress had you made on the original Homework 8? If you were running into problems, can you say what?

Slide 5