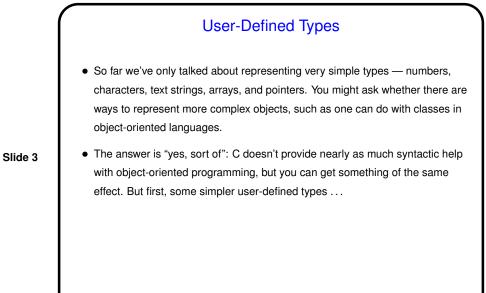
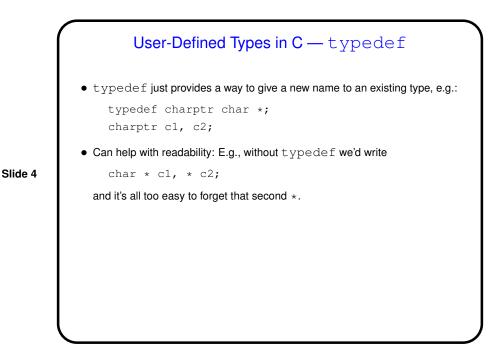
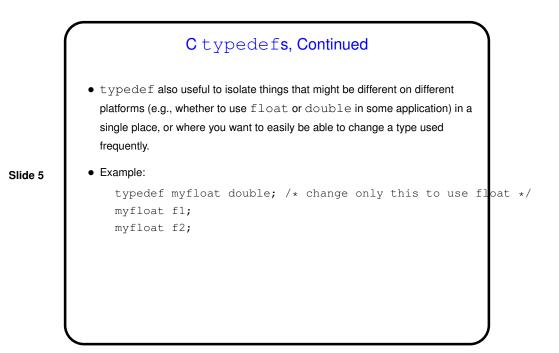


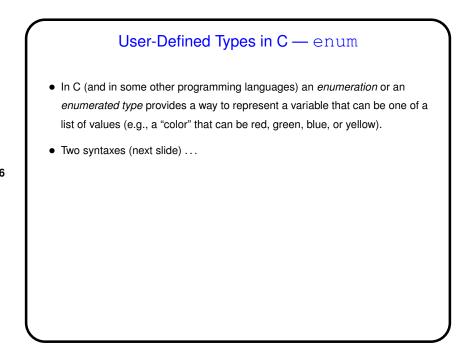
Slide 2

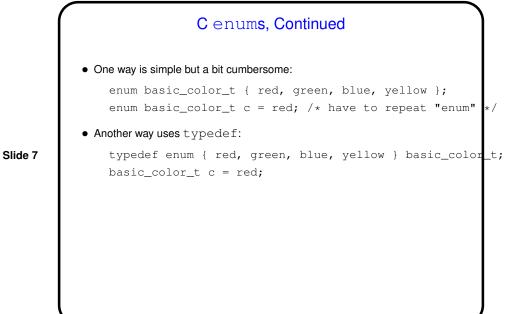
Minute Essay From Last Lecture Most people had not seen Conway's game before, though one had implemented it using OpenGL and one had heard it mentioned in a math course. (That it would be of interest in math I guess makes sense given that it was first published in a column called "Mathematical Games"?) One person thought it was interesting how simple rules could give such interesting results. Agreed!



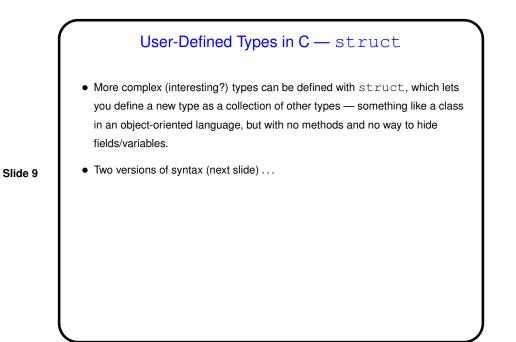


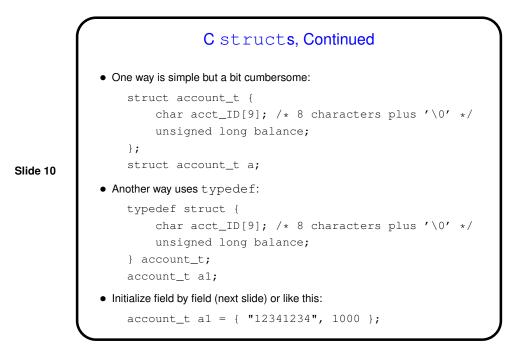


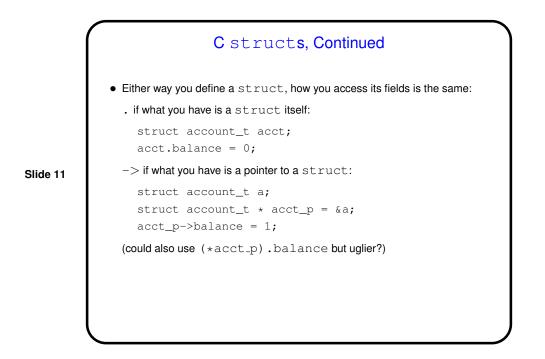


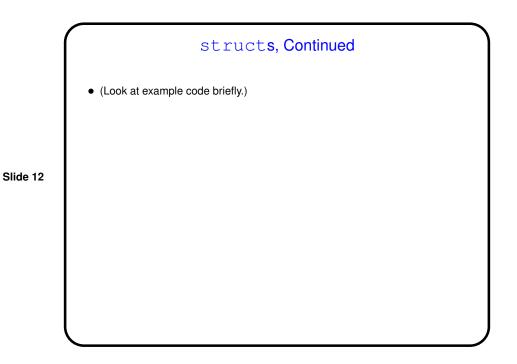


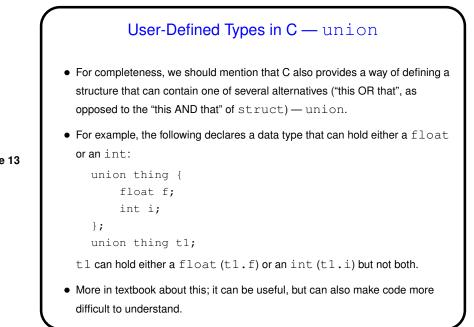
Cenums, Continued • Enumerated data types can make code more readable, and in C sometimes combine nicely with switch (to specify what happens for each value), e.g., enum basic_color_t c = /* something */ switch (c) { case red: /* something */ break; case green: /* something */ break; /* */ } • But under the hood, C enumerated types are really just integers, and they can be ugly to work with in some ways (e.g., no nice way to do I/O with them).

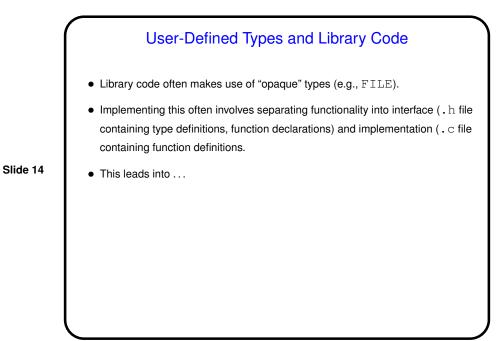














 C (like many languages) lets you split large programs into multiple source-code files. Typical to put function declarations (headers), constants, etc., in file ending . h, function definitions (code) in file ending . c.
 Compilation process can be separated into two steps: "compile" (convert source to object code) and "link" (combine object and library code to make executable).

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• make can help manage compilation process. (Can also be useful as a convenient way to always compile with preferred options.)



- As an example, consider writing code for a sorted linked list.
- (You've probably seen something like this in another language, and the ideas are the same; it's just the details that are a little messier.)

- My example follows the scheme laid out in the previous slide:
 - a . h file that defines a type for the (nodes of) the list (we'll represent a list as a pointer to its first node) and declares some functions to perform operations on the list, and
 - a . c file with the code for the functions, and
 - additional files for a test program.
- (Code next time.)

