JavaDUCK -- The Big Picture

Lexer → Parser → Data Structures → HTML Generation

GUI → Parser
JavaDUCK -- The Big Picture

- Lexer: Ask no ?s, be told no lies
- Lexer/Parser: Recitation 9 + Tokentype.java
- Parser: Handout and Next Topic
- Data Structures: CS211-- Show us you learned!
- HTML Generation: Recitation 8 + data structures
Grammars -- Just Funny Symbols

As an example, Variable Declarations:

```
[public | protected | private] [static] [final]
  TYPE VAR_NAME [, VAR_NAME1]*;
```

- `[...]` means optional
- `a|b` means a or b
- `[...]*` means any number of

Yes:

- `int a;`
- `protected static final Foo bar;`
- `private Quack duck1, duck2, duck3;`

No:

- `final static int b;`
- `public Foo, bar;`
- `private a b, c`
Parsing -- What could be Next?

[public | protected | private] [static] [final]
  TYPE VAR_NAME [, VAR_NAME1]*;

//Variables
int a, b, cat;

• Put your finger at each place and use the grammar!
• Remember the information as you go with container classes and Vectors.
• (Note: Skipping method bodies is a little different.)
Working In Stages

• Doing one part of the project at a time:
  – Pain to test
  – Hard to get partial credit

• So “slice” the other way:
  – Generate documentation for larger and larger grammars
  – See handout
Pesky Details

• Correction: Need not make documentClass method static (and better style not to)
• throws IOException
• Addition: Lexer eats comments for you (except //Variables and //Methods), so don’t worry about them
• Submission guidelines may change -- we’ll let you know.
• Be a Golden Duck -- Prizes TBA