HAWK
HTML IS ALL WE KNOW

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OVERVIEW

• Imperative Language
• Pattern-action structure based on AWK
• Handles CSS selectors and Regex for patterns
• Full type inference
TUTORIAL

• Compile source code: make
• To run tests: make test
• Write HAWK: *.hk
• To Compile a Program: ./prog <program-name> > Program.java
• To Run a Program: javac Program.java && java -cp ./_hawk_lib/jsoup.jar: Program <args>
DEMO

• Demo 1: Find all prime numbers in a document
• Demo 2: Find the average number of upvotes on the front page of Reddit
• Demo 3: Get the weather
• Demo 4: Line counter; 4500 total lines of code
• Demo 5: Nasty Type Inference
BEGIN{

fun getSingletonTable(x){
    return {x};
}

fun modifyTable(t){
    t[0] = getSingletonTable(42);
}

table = {};
table[0] = {};
nestedTable = table[0];

modifyTable(nestedTable);

nestedNestedTable = table[0][0];
value = nestedNestedTable[0];
print(value);
}

END{
LANGUAGE IMPLEMENTATION
LESSONS LEARNED

• Start early!
• Know OCaml
• Weekly group work sessions increase productivity
• Don’t commit broken code
• Know your LRM and set reasonable goals