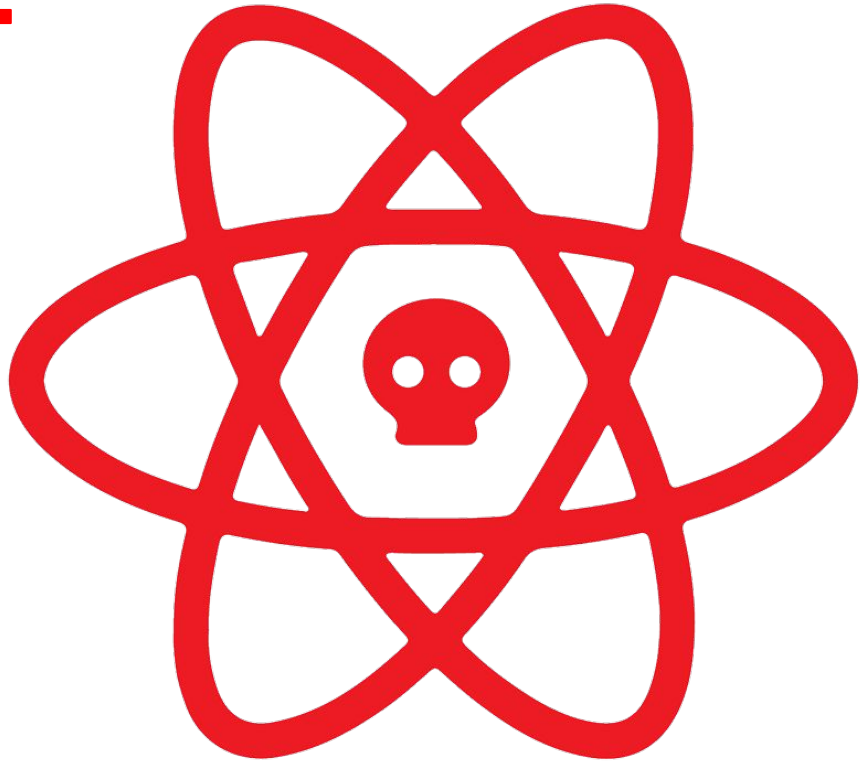
~~Rehacked~~

react reimagined



Pivot

a new spin on programming

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Pivot at a glance

Statically typed with some auto type inference

Strongly typed

Scripting focus

Compiles to JavaScript

Inspiration
F#, JavaScript, Python

Types
num, bool, str, char, list, dict

Built-ins
Math: random, pi, sqrt, abs, round
Lists: tail, head, find, len
Dicts: keys, values, includes
Strings: len, upperCase, lowerCase

Awesome **Pivot** features

Call Chaining w/ built-ins or tasks

```
(-12) >> abs >> sqrt >> pow4;
```

❌ `pow4(sqrt(abs(-12)))`

Tasks

```
num task pow4 -> num default ** 4;
```

Repeats

```
num x <- 0;
repeat
    x <- x >> inc;
when x > 10 end
```

If Shorts

```
str msg <- “hi” when x > 5 otherwise “bye”;
```

Indexing

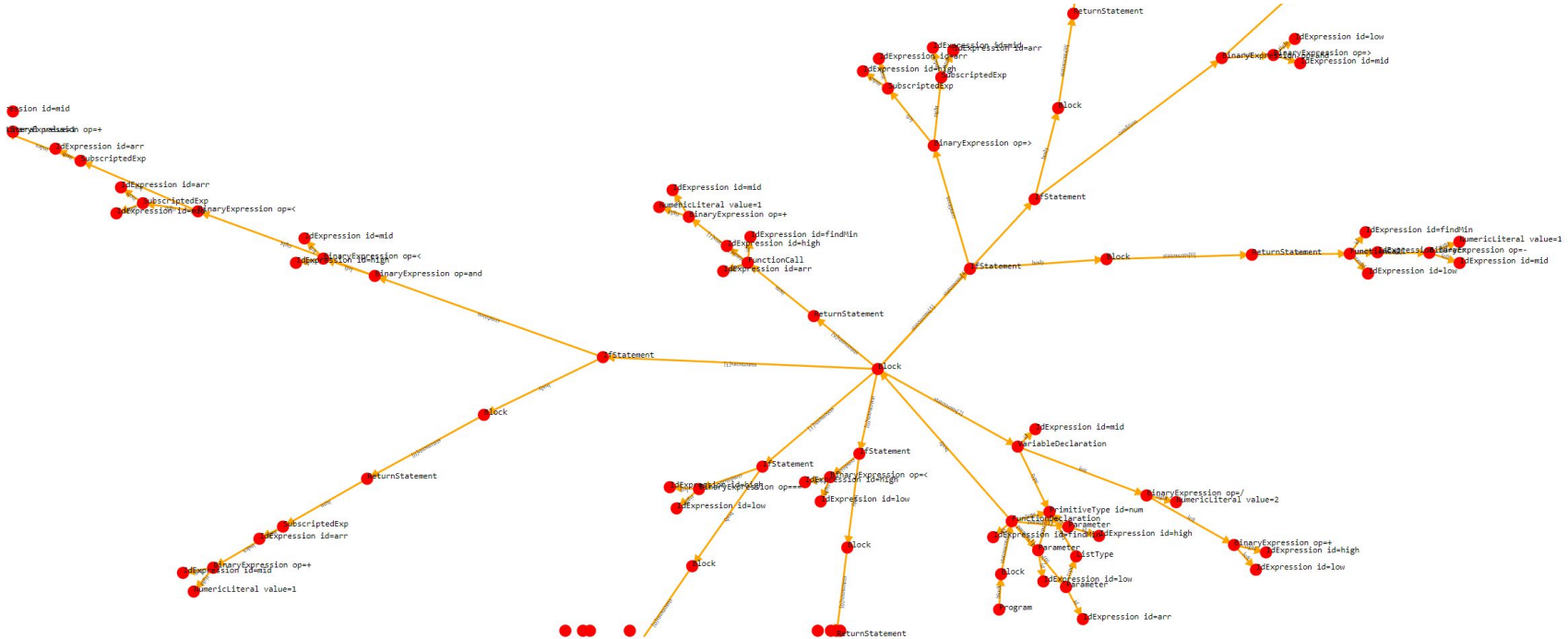
```
[num] ranNums <- [2,3,41,531,6,78,12,124];
ranNums:3;
ranNums:3...9;
```

“Suppose an array sorted in ascending order is rotated at some pivot unknown to you beforehand. Find the min.”

```
findMin([num] arr, num low, num high) -> num
    if high < low then return arr:0; end
    if high == low then return arr:low; end
    num mid <- (low + high) >> halve >> round;
    if mid < high and arr:mid+1 < arr:mid then
      return arr:mid+1;
    end
    if mid > low and arr:mid < arr:mid-1 then
      return arr:mid;
    end
    if arr:high > arr:mid then return findMin(arr, low, mid-1); end
    return findMin(arr, mid + 1, high);
end

num task pow4 -> num default ** 4;
```

AST Visualized with D3.js



print “thank you”;