

Sous



A statically typed language made for culinary enthusiasts
with improved and combined culinary practices.

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The Story

Deciding on a language

- Thematic vs. Practical Language
- Cooking Theme
 - Food
 - Universality
 - Common Love





Features

We wanted our language to be intuitive but innovative.

This means we had to combine some of our favorite features

- Keywords
- Functions
- Classes
- Optionals
- Static Typing
- Error Handling
- Try-Catch-Finally
- 3 For Loops (Regular Iterative, Collection, Pyth)
- Range — like Python



Fibonacci in Sous

```
1  ingredient N := 10 | const; // Number of Fibonacci numbers to generate
2  ingredient first := 0, second := 1, next := 0;
3
4  serve("Fibonacci Sequence up to ", N, "| numbers:");
5
6  for (ingredient plate := 0; plate < N; ++plate) {
7      if (plate <= 1) {
8          next = plate;
9      } else {
10         next = first + second;
11         first = second;
12         second = next;
13     }
14     serve(next, " ");
15 }
16 ...
17 for loop can be replaced as seen below:
18 ingredient Z := 0;
19 FPrZN {
20     ingredient plate := P;
21     ...
22 }
23 ...
```



Try-Catch-Finally in Sous

```
1    prep {  
2        ingredient _x := 0;  
3        serve("Started");  
4        eightysix("Error Entered", TypeError);  
5    } rescue (TypeError e) {  
6        serve(e.stack);  
7    } cleanup {  
8        serve("Finished");  
9    }
```



Classes in Sous

Note

Variables with an
_ signify a private
class variable

```
1 // Example usage of private variables in classes
2
3 Dish FamilyRecipe {
4     ingredient _ingredients : string;
5     ingredient _instructions : string;
6     ingredient _heat : int;
7
8     recipe bake() {
9         serve("start preheating at ", _heat+340, " degrees");
10        ingredient i := 0;
11        ingredient e := _heat;
12        while (i < e) {
13            serve("preheating... ", i+340, " degrees");
14            i = i + 1;
15        }
16
17        serve("preheating complete");
18        serve("mixing ingredients: ", _ingredients);
19        serve("baking at ", _heat+340, " degrees for 30 minutes");
20        return;
21    }
22 }
23
24 FamilyRecipe grandma_cookies := new FamilyRecipe("flour, sugar, eggs, butter", "mix ingredients, bake at 350 degrees", 10);
25 grandma_cookies.bake();
26
27 '''
28 grandma_cookies._ingredients; // Error: _ingredients is a private variable
29 '''
```



Thank you!

