ProtoObject
  Object
    CTKeyedValuedOrderedCollection
      CTNotebookKeyedValuedOrderedCollection

Notebooks

1. ESUG24: Notebooks

Let's explore a very simple string:

```
'ESUG24' asByteArray
```

ProtoObject
Object
Collection
SequenceableCollection
ArrayedCollection
ByteArray

hex	'455355473234'
asString	'ESUG24'
asArray	
asShapeBitsDump:	

ProtoObject
Object
Collection
SequenceableCollection
ArrayedCollection
Array

1	69
2	83
3	85
4	71
5	50
6	52

2. New Roassal shapes

In addition to the `Documentation Browser`, let's introduce two new Roassal shapes:

```
RSGroup new
   add: (RSPangoMarkup new
           text: 'hello

             <span font_family="Monaco" size="larger" foreground="red">world</span>!';
           yourself);
   yourself
```

ProtoObject
Object
Collection
SequenceableCollection
OrderedCollection
RSGroup

hello
1
world

```
((FileSystem root / 'Users' / 'mn' / 'Downloads'
  / 'PBE-2022-03-26-index.pdf') asFileReference asPdf pages at: 288)
    asGroup
```

ProtoObject
Object
Collection
SequenceableCollection
OrderedCollection
RSGroup

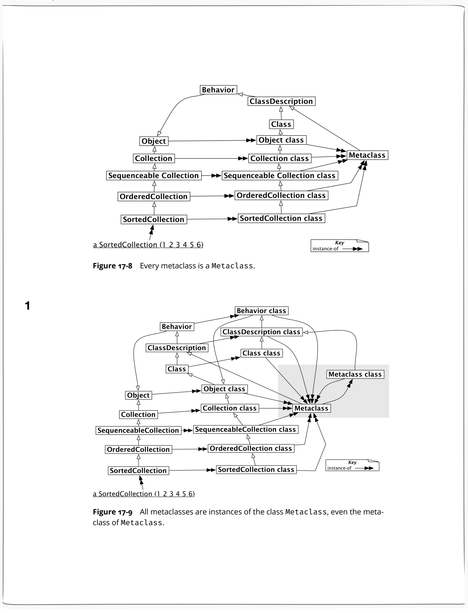


Figure 17-8 Every metaclass is a `Metaclass`.

1

Figure 17-9 All metaclasses are instances of the class `Metaclass`, even the metaclass of `Metaclass`.

3. Microdown extensions

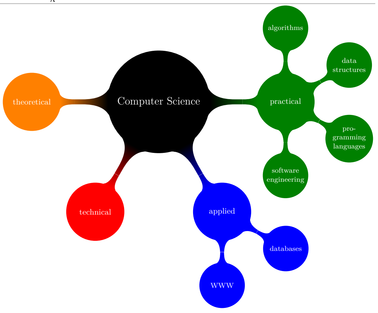
3.1. TeX environments

For mathematics, we have support standard equations [Math 1]

or `tikz` scripts [Math 2]

[Math 1] $$a = \frac{\iiiint_V \mu(t,u,v,w)\,dt\,du\,dv\,dw}{\pi}$$

[Math 2]



3.2. tree-sitter parsing

We support parsing and syntax highlights for the following languages:

- *c* [Listing 1]
- *json* [Listing 2]
- *javascript* [Listing 3]
- *python* [Listing 4]

via a VM plugin.

[Listing 1]
```c
int main (int argc, char **argv) {
   // just a comment
   printf("Hello world!");
}
```

[Listing 2]
```json
{ "adf": [ 3 ]}
```

[Listing 3]
```javascript
var canvas = new fabric.Canvas('c');

// create a rectangle with angle=45
var rect = new fabric.Rect({
  left: 100,
  top: 100,
  fill: 'red',
  width: 20,
  height: 20,
  angle: 45
});

canvas.add(rect);
```

[Listing 4]
```python
def fib(n):
   # comment
   a, b = 0, 1
   while a < n:
      print(a, end=' ')
      a, b = b, a+b

fib (1000)
```

Merci

```
'done.'
```

ProtoObject
Object
Collection
SequenceableCollection
ArrayedCollection
String
ByteString

'done.'