# rink palette

### Implementation plan

- Emulate mirror.py by initialising models already mirrored and adding colour symmetry
- Convert palette.py into an in-memory lookup table. E.g model.reverse(fg) -> bg
- Limit the number of colour per model
- Use the 'all' cells to define the primary palette, and pair 'one' cells with complimentary colours

#### Foreground colours

- #DC143C crimson
- #C71585 mediumvioletred
- #FFA500 orange
- #32CD32 limegreen
- #4B0082 indigo

#### **Background colours**

- #FFF white
- #9ACD32 yellowgreen
- #CD5C5C indianred
- #000 black

#### **Opacity**

Opacity can be set at

- 1.0
- 0.7
- 0.4
- 0.0

#### **Transparencies**

A transparency is when a foreground colour is overlaid onto a background with enough opacity to create a new distinct colour. This gives eight possibilities for each forground.

white	yellowgreen	indianred	black	
0.7	0.7	0.7	0.7	
0.4	0.4	0.4	0.4	

An overlay is when the foreground and background occupy the same co-ordinates. In most cases, e.g. a triangle there is both an overlay and direct exposure of the background colour. The background colour is opaque (opacity = 1.0). These four colours are not shown below.

The opposite is also a special case. When the foreground is opaque, then the background is hidden. These colours are shown in the first column below.

01	02	03	04	05	06	07	08	09
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45

## **Colour table**

```
01 fill: #C71585 opacity: 1.0 bg: #FFF
02 fill: #C71585 opacity: 0.7 bg: #FFF
03 fill: #C71585 opacity: 0.7 bg: #9ACD32
04 fill: #C71585 opacity: 0.7 bg: #CD5C5C
05 fill: #C71585 opacity: 0.7 bg: #000
06 fill: #C71585 opacity: 0.4 bg: #FFF
07 fill: #C71585 opacity: 0.4 bg: #9ACD32
08 fill: #C71585 opacity: 0.4 bg: #CD5C5C
09 fill: #C71585 opacity: 0.4 bg: #000
10 fill: #DC143C opacity: 1.0 bg: #FFF
11 fill: #DC143C opacity: 0.7 bg: #FFF
12 fill: #DC143C opacity: 0.7 bg: #9ACD32
13 fill: #DC143C opacity: 0.7 bg: #CD5C5C
14 fill: #DC143C opacity: 0.7 bg: #000
15 fill: #DC143C opacity: 0.4 bg: #FFF
16 fill: #DC143C opacity: 0.4 bg: #9ACD32
17 fill: #DC143C opacity: 0.4 bg: #CD5C5C
18 fill: #DC143C opacity: 0.4 bg: #000
19 fill: #FFA500 opacity: 1.0 bg: #FFF
20 fill: #FFA500 opacity: 0.7 bg: #FFF
21 fill: #FFA500 opacity: 0.7 bg: #9ACD32
22 fill: #FFA500 opacity: 0.7 bg: #CD5C5C
23 fill: #FFA500 opacity: 0.7 bg: #000
24 fill: #FFA500 opacity: 0.4 bg: #FFF
25 fill: #FFA500 opacity: 0.4 bg: #9ACD32
26 fill: #FFA500 opacity: 0.4 bg: #CD5C5C
27 fill: #FFA500 opacity: 0.4 bg: #000
28 fill: #32CD32 opacity: 1.0 bg: #FFF
29 fill: #32CD32 opacity: 0.7 bg: #FFF
30 fill: #32CD32 opacity: 0.7 bg: #9ACD32
31 fill: #32CD32 opacity: 0.7 bg: #CD5C5C
32 fill: #32CD32 opacity: 0.7 bg: #000
33 fill: #32CD32 opacity: 0.4 bg: #FFF
34 fill: #32CD32 opacity: 0.4 bg: #9ACD32
35 fill: #32CD32 opacity: 0.4 bg: #CD5C5C
36 fill: #32CD32 opacity: 0.4 bg: #000
37 fill: #4B0082 opacity: 1.0 bg: #FFF
38 fill: #4B0082 opacity: 0.7 bg: #FFF
39 fill: #4B0082 opacity: 0.7 bg: #9ACD32
40 fill: #4B0082 opacity: 0.7 bg: #CD5C5C
41 fill: #4B0082 opacity: 0.7 bg: #000
42 fill: #4B0082 opacity: 0.4 bg: #FFF
43 fill: #4B0082 opacity: 0.4 bg: #9ACD32
44 fill: #4B0082 opacity: 0.4 bg: #CD5C5C
45 fill: #4B0082 opacity: 0.4 bg: #000
```