Flow free as a CSP:

# Possibility 1:

Variables: each color red, blue, yellow, ect.

Domain (each Variable): Any integer grid coordinate (x,y) in the input maze

Constraints:

* Cannot cover existing color
* Must be connected/continuous (can only add color in adjacent square)
* (somehow check board full)

# Possibility 2

Variables: each integer grid coordinate (x,y) in the input maze

Domain (each Variable): each possible color: red, blue, yellow, ect.

Constraints:

* Cannot cover existing color (cannot have more than one or replace)
* Must be connected/continuous (red touching red on 1-2 sides exactly)
* Each space filled