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Ryan McGarvey
Group FBIVan

1. We could have the sparki rescan its environment and if something new is there you have to then rerun dijkstras.
2. See below:

adam@adam-Aspire-R5	adam@adam-Aspire-R5-571
File Edit View Search Terminal Help	File Edit View Search Terminal Help
Source: (1.2, 0.2)	Source: (0.9, 0.3)
Goal: (0.225, 0.975)	Goal: (0.9, 0.75)
Path: 181 -> 180 -> 179 -> 178 -> 177 -> 176 -> 175 -> 174 -> 173 -> 172 -> 171 -> 170 -> 169 -> 168 -> 167 -> 166 -> 165 -> 164 -> 163 -> 162 -> 161 -> 160 -> 159 -> 158 -> 157 -> 156 -> 155 -> 154 -> 153 -> 152 -> 151 -> 150 -> 149 -> 148 -> 147 -> 146 -> 145 -> 144 -> 143 -> 142 -> 141 -> 140 -> 139 -> 138 -> 137 -> 136 -> 135 -> 134 -> 133 -> 132 -> 131 -> 130 -> 129 -> 128 -> 127 -> 126 -> 125 -> 124 -> 123 -> 122 -> 121 -> 120 -> 119 -> 118 -> 117 -> 116 -> 115 -> 114 -> 113 -> 112 -> 111 -> 110 -> 109 -> 108 -> 107 -> 106 -> 105 -> 104 -> 103 -> 102 -> 101 -> 100 -> 99 -> 98 -> 97 -> 96 -> 95 -> 94 -> 93 -> 92 -> 91 -> 90 -> 89 -> 88 -> 87 -> 86 -> 85 -> 84 -> 83 -> 82 -> 81 -> 80 -> 79 -> 78 -> 77 -> 76 -> 75 -> 74 -> 73 -> 72 -> 71 -> 70 -> 69 -> 68 -> 67 -> 66 -> 65 -> 64 -> 63 -> 62 -> 61 -> 60 -> 59 -> 58 -> 57 -> 56 -> 55 -> 54 -> 53 -> 52 -> 51 -> 50 -> 49 -> 48 -> 47 -> 46 -> 45 -> 44 -> 43 -> 42 -> 41 -> 40 -> 39 -> 38 -> 37 -> 36 -> 35 -> 34 -> 33 -> 32 -> 31 -> 30 -> 29 -> 28 -> 27 -> 26 -> 25 -> 24 -> 23 -> 22 -> 21 -> 20 -> 19 -> 18 -> 17 -> 16 -> 15 -> 14 -> 13 -> 12 -> 11 -> 10 -> 9 -> 8 -> 7 -> 6 -> 5 -> 4 -> 3 -> 2 -> 1	Path: 272 -> 271 -> 270 -> 269 -> 268 -> 267 -> 266 -> 265 -> 264 -> 263 -> 262 -> 261 -> 260 -> 259 -> 258 -> 257 -> 256 -> 255 -> 254 -> 253 -> 252 -> 251 -> 250 -> 249 -> 248 -> 247 -> 246 -> 245 -> 244 -> 243 -> 242 -> 241 -> 240 -> 239 -> 238 -> 237 -> 236 -> 235 -> 234 -> 233 -> 232 -> 231 -> 230 -> 229 -> 228 -> 227 -> 226 -> 225 -> 224 -> 223 -> 222 -> 221 -> 220 -> 219 -> 218 -> 217 -> 216 -> 215 -> 214 -> 213 -> 212 -> 211 -> 210 -> 209 -> 208 -> 207 -> 206 -> 205 -> 204 -> 203 -> 202 -> 201 -> 200 -> 199 -> 198 -> 197 -> 196 -> 195 -> 194 -> 193 -> 192 -> 191 -> 190 -> 189 -> 188 -> 187 -> 186 -> 185 -> 184 -> 183 -> 182 -> 181 -> 180 -> 179 -> 178 -> 177 -> 176 -> 175 -> 174 -> 173 -> 172 -> 171 -> 170 -> 169 -> 168 -> 167 -> 166 -> 165 -> 164 -> 163 -> 162 -> 161 -> 160 -> 159 -> 158 -> 157 -> 156 -> 155 -> 154 -> 153 -> 152 -> 151 -> 150 -> 149 -> 148 -> 147 -> 146 -> 145 -> 144 -> 143 -> 142 -> 141 -> 140 -> 139 -> 138 -> 137 -> 136 -> 135 -> 134 -> 133 -> 132 -> 131 -> 130 -> 129 -> 128 -> 127 -> 126 -> 125 -> 124 -> 123 -> 122 -> 121 -> 120 -> 119 -> 118 -> 117 -> 116 -> 115 -> 114 -> 113 -> 112 -> 111 -> 110 -> 109 -> 108 -> 107 -> 106 -> 105 -> 104 -> 103 -> 102 -> 101 -> 100 -> 99 -> 98 -> 97 -> 96 -> 95 -> 94 -> 93 -> 92 -> 91 -> 90 -> 89 -> 88 -> 87 -> 86 -> 85 -> 84 -> 83 -> 82 -> 81 -> 80 -> 79 -> 78 -> 77 -> 76 -> 75 -> 74 -> 73 -> 72 -> 71 -> 70 -> 69 -> 68 -> 67 -> 66 -> 65 -> 64 -> 63 -> 62 -> 61 -> 60 -> 59 -> 58 -> 57 -> 56 -> 55 -> 54 -> 53 -> 52 -> 51 -> 50 -> 49 -> 48 -> 47 -> 46 -> 45 -> 44 -> 43 -> 42 -> 41 -> 40 -> 39 -> 38 -> 37 -> 36 -> 35 -> 34 -> 33 -> 32 -> 31 -> 30 -> 29 -> 28 -> 27 -> 26 -> 25 -> 24 -> 23 -> 22 -> 21 -> 20 -> 19 -> 18 -> 17 -> 16 -> 15 -> 14 -> 13 -> 12 -> 11 -> 10 -> 9 -> 8 -> 7 -> 6 -> 5 -> 4 -> 3 -> 2 -> 1
Waypoints (in world coordinates):	Waypoints (in world coordinates):
(1.209375, 0.20625)	(0.928125, 0.31875)
(1.153125, 0.20625)	(0.8718750000000001, 0.31875)
(1.096875, 0.20625)	(0.815625, 0.31875)
(1.0406250000000001, 0.20625)	(0.759375, 0.31875)
(0.984375, 0.20625)	(0.703125, 0.31875)
(0.928125, 0.20625)	(0.646875, 0.31875)
(0.8718750000000001, 0.20625)	(0.646875, 0.35625)
(0.815625, 0.20625)	(0.646875, 0.39375)
(0.759375, 0.20625)	(0.646875, 0.43124999999999997)
(0.703125, 0.20625)	(0.646875, 0.46875)
(0.646875, 0.20625)	(0.646875, 0.50625)
(0.5906250000000001, 0.20625)	(0.646875, 0.54375)
(0.534375, 0.20625)	(0.646875, 0.5812499999999999)
(0.478125, 0.20625)	(0.646875, 0.61875)
(0.421875, 0.20625)	(0.646875, 0.65625)
(0.36562500000000003, 0.20625)	(0.703125, 0.65625)
(0.309375, 0.20625)	(0.759375, 0.65625)
(0.253125, 0.20625)	(0.815625, 0.65625)
(0.253125, 0.24375)	(0.8718750000000001, 0.65625)
(0.253125, 0.28125)	(0.928125, 0.65625)
(0.253125, 0.31875)	(0.928125, 0.69375)
(0.253125, 0.35625)	(0.928125, 0.73125)
(0.253125, 0.39375)	(0.928125, 0.7687499999999999)
(0.253125, 0.43124999999999997)	
(0.253125, 0.46875)	
(0.253125, 0.50625)	
(0.253125, 0.54375)	
(0.253125, 0.5812499999999999)	
(0.253125, 0.61875)	
(0.253125, 0.65625)	
(0.253125, 0.69375)	
(0.253125, 0.73125)	
(0.253125, 0.7687499999999999)	
(0.253125, 0.80625)	
(0.253125, 0.84375)	
(0.253125, 0.88125)	
(0.253125, 0.91875)	
(0.253125, 0.9562499999999999)	
(0.253125, 0.9937499999999999)	

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adam@adam-Aspire-R5-571T
File Edit View Search Terminal Help
Source: (1.2, 0.2)
Goal: (0.225, 0.975)
Path: 181 -> 180 -> 179 -> 178 -> 177
-> 170 -> 169 -> 168 -> 167 -> 199 ->
324 -> 356 -> 388 -> 420 -> 452 -> 484
-> 708 -> 740 -> 772 -> 804 -> 836
Waypoints (in world coordinates):
(1.209375, 0.20625)
(1.153125, 0.20625)
(1.096875, 0.20625)
(1.0406250000000001, 0.20625)
(0.984375, 0.20625)
(0.928125, 0.20625)
(0.8718750000000001, 0.20625)
(0.815625, 0.20625)
(0.759375, 0.20625)
(0.703125, 0.20625)
(0.646875, 0.20625)
(0.5906250000000001, 0.20625)
(0.534375, 0.20625)
(0.478125, 0.20625)
(0.421875, 0.20625)
(0.421875, 0.24375)
(0.3656250000000003, 0.24375)
(0.309375, 0.24375)
(0.253125, 0.24375)
(0.253125, 0.28125)
(0.253125, 0.31875)
(0.253125, 0.35625)
(0.253125, 0.39375)
(0.253125, 0.4312499999999997)
(0.253125, 0.46875)
(0.253125, 0.50625)
(0.253125, 0.54375)
(0.253125, 0.5812499999999999)
(0.253125, 0.61875)
(0.253125, 0.65625)
(0.253125, 0.69375)
(0.253125, 0.73125)
(0.253125, 0.7687499999999999)
(0.253125, 0.80625)
(0.253125, 0.84375)
(0.253125, 0.88125)
(0.253125, 0.91875)
(0.253125, 0.9562499999999999)
(0.253125, 0.9937499999999999)

adam@adam-Aspire-R5-571T
File Edit View Search Terminal Help
Source: (0.225, 0.6)
Goal: (1.35, 0.3)
Path: 516 -> 517 -> 518 -> 519 -> 520 ->
-> 329 -> 297 -> 265 -> 233 -> 234 -> 2
241 -> 242 -> 243 -> 244 -> 245 -> 246
Waypoints (in world coordinates):
(0.253125, 0.61875)
(0.309375, 0.61875)
(0.3656250000000003, 0.61875)
(0.421875, 0.61875)
(0.478125, 0.61875)
(0.534375, 0.61875)
(0.534375, 0.5812499999999999)
(0.534375, 0.54375)
(0.534375, 0.50625)
(0.534375, 0.46875)
(0.534375, 0.4312499999999997)
(0.534375, 0.39375)
(0.534375, 0.35625)
(0.534375, 0.31875)
(0.534375, 0.28125)
(0.5906250000000001, 0.28125)
(0.646875, 0.28125)
(0.703125, 0.28125)
(0.759375, 0.28125)
(0.815625, 0.28125)
(0.8718750000000001, 0.28125)
(0.928125, 0.28125)
(0.984375, 0.28125)
(1.0406250000000001, 0.28125)
(1.096875, 0.28125)
(1.153125, 0.28125)
(1.209375, 0.28125)
(1.265625, 0.28125)
(1.3218750000000001, 0.28125)
(1.378125, 0.28125)
(1.378125, 0.31875)
```

3. See included files in zip.
4. See top of page.
5. 6 + π hours