Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 427, 427, 327

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 427 the agent chose NORTH in what state would it chose EAST?   
In state 327:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 467, 467, 367, 267

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 467 the agent chose NORTH in what state would it chose EAST?   
In state 267:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 276, 276, 176, 156

Loss function value: 0.9

Action path: NORTH, WEST

Statement: Given that in state 276 the agent chose WEST in what state would it chose SOUTH?   
In state 156:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 276, 276, 376

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 276 the agent chose WEST in what state would it chose NORTH?   
In state 376:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 186, 186

Loss function value: 0.0

Action path:

Statement: Given that in state 186 the agent chose NORTH in what state would it chose SOUTH?   
In state 194 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 186, 186

Loss function value: 0.0

Action path:

Statement: Given that in state 186 the agent chose NORTH in what state would it chose WEST?   
In state 182 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 318, 318, 218, 238, 338

Loss function value: 0.85

Action path: NORTH, EAST, SOUTH

Statement: Given that in state 318 the agent chose SOUTH in what state would it chose NORTH?   
In state 338:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 372, 372

Loss function value: 0.0

Action path:

Statement: Given that in state 372 the agent chose SOUTH in what state would it chose NORTH?   
In state 368 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 372, 372

Loss function value: 0.0

Action path:

Statement: Given that in state 372 the agent chose SOUTH in what state would it chose EAST?   
In state 364 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 66, 66

Loss function value: 0.0

Action path:

Statement: Given that in state 66 the agent chose EAST in what state would it chose SOUTH?   
In state 62 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 66, 66, 86

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 66 the agent chose EAST in what state would it chose WEST?   
In state 82 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 388, 388, 288

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 388 the agent chose NORTH in what state would it chose SOUTH?   
In state 292 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 388, 388

Loss function value: 0.0

Action path:

Statement: Given that in state 388 the agent chose NORTH in what state would it chose WEST?   
In state 392 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 194, 194

Loss function value: 0.0

Action path:

Statement: Given that in state 194 the agent chose SOUTH in what state would it chose NORTH?   
In state 186 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 194, 194

Loss function value: 0.0

Action path:

Statement: Given that in state 194 the agent chose SOUTH in what state would it chose WEST?   
In state 182 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 119, 119, 139

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 119 the agent chose EAST in what state would it chose SOUTH?   
In state 139:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 119, 119, 219, 319

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 119 the agent chose EAST in what state would it chose NORTH?   
In state 319:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 337, 337, 237, 137

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 337 the agent chose NORTH in what state would it chose SOUTH?   
In state 137:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 337, 337, 237

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 337 the agent chose NORTH in what state would it chose EAST?   
In state 237:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 1

State Path: 101, 101

Loss function value: 0.0

Action path:

Statement: Given that in state 101 the agent chose NORTH in what state would it chose SOUTH?   
In state 109 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 101, 101, 1

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 101 the agent chose NORTH in what state would it chose EAST?   
In state 13 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 152, 152, 252, 352

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 152 the agent chose SOUTH in what state would it chose NORTH?   
In state 352:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 152, 152

Loss function value: 0.0

Action path:

Statement: Given that in state 152 the agent chose SOUTH in what state would it chose EAST?   
In state 144 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 178, 178, 158

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 178 the agent chose WEST in what state would it chose SOUTH?   
In state 158:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 178, 178, 278, 378

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 178 the agent chose WEST in what state would it chose NORTH?   
In state 378:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 2

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 308, 308

Loss function value: 0.0

Action path:

Statement: Given that in state 308 the agent chose SOUTH in what state would it chose NORTH?   
In state 304 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 286, 286, 186

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 286 the agent chose NORTH in what state would it chose SOUTH?   
In state 194 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 286, 286

Loss function value: 0.0

Action path:

Statement: Given that in state 286 the agent chose NORTH in what state would it chose WEST?   
In state 282 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 397, 397, 297, 277, 257, 237, 137

Loss function value: 0.75

Action path: NORTH, WEST, WEST, WEST, NORTH

Statement: Given that in state 397 the agent chose NORTH in what state would it chose SOUTH?   
In state 137:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 16, 16, 36, 136, 236, 256, 156

Loss function value: 0.75

Action path: EAST, SOUTH, SOUTH, EAST, NORTH

Statement: Given that in state 16 the agent chose DROPOFF in what state would it chose SOUTH?   
In state 156:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 284, 284

Loss function value: 0.0

Action path:

Statement: Given that in state 284 the agent chose NORTH in what state would it chose SOUTH?   
In state 292 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 284, 284

Loss function value: 0.0

Action path:

Statement: Given that in state 284 the agent chose NORTH in what state would it chose WEST?   
In state 288 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 48, 48

Loss function value: 0.0

Action path:

Statement: Given that in state 48 the agent chose SOUTH in what state would it chose EAST?   
In state 44 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 277, 277, 177, 77, 57

Loss function value: 0.85

Action path: NORTH, NORTH, WEST

Statement: Given that in state 277 the agent chose EAST in what state would it chose SOUTH?   
In state 57:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 277, 277, 297

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 277 the agent chose EAST in what state would it chose NORTH?   
In state 297:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 7, 7, 107

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 7 the agent chose SOUTH in what state would it chose EAST?   
In state 107:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 149, 149, 249, 349

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 149 the agent chose SOUTH in what state would it chose NORTH?   
In state 341 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 149, 149, 249

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 149 the agent chose SOUTH in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 293, 293, 273

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 293 the agent chose WEST in what state would it chose SOUTH?   
In state 273:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 293, 293, 273, 373

Loss function value: 0.9

Action path: WEST, SOUTH

Statement: Given that in state 293 the agent chose WEST in what state would it chose NORTH?   
In state 361 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 62, 62

Loss function value: 0.0

Action path:

Statement: Given that in state 62 the agent chose SOUTH in what state would it chose EAST?   
In state 66 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 62, 62, 162

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 62 the agent chose SOUTH in what state would it chose WEST?   
In state 162:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 223, 223, 123

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 223 the agent chose WEST in what state would it chose SOUTH?   
In state 127 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 223, 223, 323

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 223 the agent chose WEST in what state would it chose NORTH?   
In state 323:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 223, 223

Loss function value: 0.0

Action path:

Statement: Given that in state 223 the agent chose WEST in what state would it chose EAST?   
In state 227 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 123, 123

Loss function value: 0.0

Action path:

Statement: Given that in state 123 the agent chose WEST in what state would it chose SOUTH?   
In state 127 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 123, 123, 103

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 123 the agent chose WEST in what state would it chose NORTH?   
In state 103:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 44, 44

Loss function value: 0.0

Action path:

Statement: Given that in state 44 the agent chose EAST in what state would it chose SOUTH?   
In state 48 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 327, 327, 227, 127

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 327 the agent chose EAST in what state would it chose SOUTH?   
In state 127:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 327, 327

Loss function value: 0.0

Action path:

Statement: Given that in state 327 the agent chose EAST in what state would it chose NORTH?   
In state 323 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 211, 211

Loss function value: 0.0

Action path:

Statement: Given that in state 211 the agent chose SOUTH in what state would it chose NORTH?   
In state 203 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 211, 211

Loss function value: 0.0

Action path:

Statement: Given that in state 211 the agent chose SOUTH in what state would it chose EAST?   
In state 207 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 326, 326, 226, 126

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 326 the agent chose EAST in what state would it chose SOUTH?   
In state 126:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 326, 326

Loss function value: 0.0

Action path:

Statement: Given that in state 326 the agent chose EAST in what state would it chose NORTH?   
In state 322 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 369, 369

Loss function value: 0.0

Action path:

Statement: Given that in state 369 the agent chose NORTH in what state would it chose SOUTH?   
In state 373 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 369, 369, 269, 249

Loss function value: 0.9

Action path: NORTH, WEST

Statement: Given that in state 369 the agent chose NORTH in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 98, 98, 78, 58

Loss function value: 0.9

Action path: WEST, WEST

Statement: Given that in state 98 the agent chose WEST in what state would it chose SOUTH?   
In state 58:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 398, 398, 298, 278, 178, 158

Loss function value: 0.8

Action path: NORTH, WEST, NORTH, WEST

Statement: Given that in state 398 the agent chose NORTH in what state would it chose SOUTH?   
In state 158:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 398, 398, 298

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 398 the agent chose NORTH in what state would it chose WEST?   
In state 298:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 357, 357, 257, 237, 137

Loss function value: 0.85

Action path: NORTH, WEST, NORTH

Statement: Given that in state 357 the agent chose NORTH in what state would it chose SOUTH?   
In state 137:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 267, 267, 167, 67

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 267 the agent chose EAST in what state would it chose SOUTH?   
In state 71 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 267, 267, 287

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 267 the agent chose EAST in what state would it chose NORTH?   
In state 287:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 267, 267

Loss function value: 0.0

Action path:

Statement: Given that in state 267 the agent chose EAST in what state would it chose WEST?   
In state 263 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 499, 499, 399, 299, 279, 259, 359

Loss function value: 0.75

Action path: NORTH, NORTH, WEST, WEST, SOUTH

Statement: Given that in state 499 the agent chose WEST in what state would it chose NORTH?   
In state 359:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target SOUTH

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target SOUTH

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 374, 374

Loss function value: 0.0

Action path:

Statement: Given that in state 374 the agent chose SOUTH in what state would it chose NORTH?   
In state 362 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 374, 374, 274

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 374 the agent chose SOUTH in what state would it chose EAST?   
In state 266 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 299, 299, 279, 259, 359

Loss function value: 0.85

Action path: WEST, WEST, SOUTH

Statement: Given that in state 299 the agent chose SOUTH in what state would it chose NORTH?   
In state 359:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 299, 299, 199

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 299 the agent chose SOUTH in what state would it chose WEST?   
In state 199:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 67, 67

Loss function value: 0.0

Action path:

Statement: Given that in state 67 the agent chose EAST in what state would it chose SOUTH?   
In state 71 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 67, 67

Loss function value: 0.0

Action path:

Statement: Given that in state 67 the agent chose EAST in what state would it chose WEST?   
In state 63 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 271, 271, 251, 151

Loss function value: 0.9

Action path: WEST, NORTH

Statement: Given that in state 271 the agent chose WEST in what state would it chose SOUTH?   
In state 151:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 271, 271, 371

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 271 the agent chose WEST in what state would it chose NORTH?   
In state 371:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 271, 271

Loss function value: 0.0

Action path:

Statement: Given that in state 271 the agent chose WEST in what state would it chose EAST?   
In state 267 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 363, 363, 263, 243, 143

Loss function value: 0.85

Action path: NORTH, WEST, NORTH

Statement: Given that in state 363 the agent chose NORTH in what state would it chose SOUTH?   
In state 143:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 363, 363, 263

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 363 the agent chose NORTH in what state would it chose EAST?   
In state 267 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 381, 381

Loss function value: 0.0

Action path:

Statement: Given that in state 381 the agent chose WEST in what state would it chose SOUTH?   
In state 393 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 381, 381, 361

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 381 the agent chose WEST in what state would it chose NORTH?   
In state 361:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 396, 396, 296, 276, 256, 156

Loss function value: 0.8

Action path: NORTH, WEST, WEST, NORTH

Statement: Given that in state 396 the agent chose WEST in what state would it chose SOUTH?   
In state 156:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 396, 396, 376

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 396 the agent chose WEST in what state would it chose NORTH?   
In state 376:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 111, 111

Loss function value: 0.0

Action path:

Statement: Given that in state 111 the agent chose SOUTH in what state would it chose NORTH?   
In state 103 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 111, 111

Loss function value: 0.0

Action path:

Statement: Given that in state 111 the agent chose SOUTH in what state would it chose EAST?   
In state 107 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 241, 241, 261

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 241 the agent chose WEST in what state would it chose SOUTH?   
In state 273 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 241, 241, 341

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 241 the agent chose WEST in what state would it chose NORTH?   
In state 341:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 241, 241

Loss function value: 0.0

Action path:

Statement: Given that in state 241 the agent chose WEST in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 117, 117, 217, 317

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 117 the agent chose SOUTH in what state would it chose NORTH?   
In state 317:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 117, 117, 17

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 117 the agent chose SOUTH in what state would it chose EAST?   
In state 17:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 97, 97, 77, 57

Loss function value: 0.9

Action path: WEST, WEST

Statement: Given that in state 97 the agent chose DROPOFF in what state would it chose SOUTH?   
In state 57:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target WEST

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 409, 409

Loss function value: 0.0

Action path:

Statement: Given that in state 409 the agent chose PICKUP in what state would it chose NORTH?   
In state 401 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 41, 41, 141, 241

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 41 the agent chose SOUTH in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 383, 383, 283, 183, 83

Loss function value: 0.85

Action path: NORTH, NORTH, NORTH

Statement: Given that in state 383 the agent chose NORTH in what state would it chose SOUTH?   
In state 91 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 383, 383, 283

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 383 the agent chose NORTH in what state would it chose WEST?   
In state 283:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 447, 447, 347

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 447 the agent chose NORTH in what state would it chose WEST?   
In state 343 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 231, 231, 211

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 231 the agent chose WEST in what state would it chose SOUTH?   
In state 211:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 231, 231, 211

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 231 the agent chose WEST in what state would it chose NORTH?   
In state 203 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 231, 231

Loss function value: 0.0

Action path:

Statement: Given that in state 231 the agent chose WEST in what state would it chose EAST?   
In state 227 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 221, 221, 121

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 221 the agent chose WEST in what state would it chose SOUTH?   
In state 133 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 221, 221, 201

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 221 the agent chose WEST in what state would it chose NORTH?   
In state 201:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 221, 221

Loss function value: 0.0

Action path:

Statement: Given that in state 221 the agent chose WEST in what state would it chose EAST?   
In state 233 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 341, 341, 241, 261

Loss function value: 0.9

Action path: NORTH, EAST

Statement: Given that in state 341 the agent chose NORTH in what state would it chose SOUTH?   
In state 273 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 1

State Path: 341, 341

Loss function value: 0.0

Action path:

Statement: Given that in state 341 the agent chose NORTH in what state would it chose WEST?   
In state 349 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 49, 49, 149, 249

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 49 the agent chose SOUTH in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 6, 6, 106

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 6 the agent chose SOUTH in what state would it chose EAST?   
In state 114 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 173, 173, 273, 373

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 173 the agent chose SOUTH in what state would it chose NORTH?   
In state 361 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 173, 173, 153, 253

Loss function value: 0.9

Action path: WEST, SOUTH

Statement: Given that in state 173 the agent chose SOUTH in what state would it chose EAST?   
In state 253:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 173, 173

Loss function value: 0.0

Action path:

Statement: Given that in state 173 the agent chose SOUTH in what state would it chose WEST?   
In state 161 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 392, 392, 292

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 392 the agent chose WEST in what state would it chose SOUTH?   
In state 292:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 392, 392

Loss function value: 0.0

Action path:

Statement: Given that in state 392 the agent chose WEST in what state would it chose NORTH?   
In state 384 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 53, 53, 153, 253

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 53 the agent chose SOUTH in what state would it chose EAST?   
In state 253:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 254, 254, 274

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 254 the agent chose EAST in what state would it chose SOUTH?   
In state 274:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 254, 254, 354

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 254 the agent chose EAST in what state would it chose NORTH?   
In state 354:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 254, 254

Loss function value: 0.0

Action path:

Statement: Given that in state 254 the agent chose EAST in what state would it chose WEST?   
In state 242 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 34, 34

Loss function value: 0.0

Action path:

Statement: Given that in state 34 the agent chose SOUTH in what state would it chose WEST?   
In state 22 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 279, 279, 259, 359

Loss function value: 0.9

Action path: WEST, SOUTH

Statement: Given that in state 279 the agent chose SOUTH in what state would it chose NORTH?   
In state 359:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 279, 279, 259

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 279 the agent chose SOUTH in what state would it chose EAST?   
In state 259:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 279, 279, 299, 199

Loss function value: 0.9

Action path: EAST, NORTH

Statement: Given that in state 279 the agent chose SOUTH in what state would it chose WEST?   
In state 199:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 204, 204

Loss function value: 0.0

Action path:

Statement: Given that in state 204 the agent chose EAST in what state would it chose SOUTH?   
In state 208 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 0

State Path: 204, 204, 304

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 204 the agent chose EAST in what state would it chose NORTH?   
In state 304:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 202, 202, 102

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 202 the agent chose NORTH in what state would it chose SOUTH?   
In state 106 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 202, 202

Loss function value: 0.0

Action path:

Statement: Given that in state 202 the agent chose NORTH in what state would it chose EAST?   
In state 206 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 222, 222, 122

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 222 the agent chose WEST in what state would it chose SOUTH?   
In state 126 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 222, 222, 322

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 222 the agent chose WEST in what state would it chose NORTH?   
In state 322:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 222, 222

Loss function value: 0.0

Action path:

Statement: Given that in state 222 the agent chose WEST in what state would it chose EAST?   
In state 226 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 132, 132, 232, 332

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 132 the agent chose SOUTH in what state would it chose NORTH?   
In state 332:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 132, 132

Loss function value: 0.0

Action path:

Statement: Given that in state 132 the agent chose SOUTH in what state would it chose WEST?   
In state 128 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 114, 114

Loss function value: 0.0

Action path:

Statement: Given that in state 114 the agent chose EAST in what state would it chose SOUTH?   
In state 106 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 114, 114

Loss function value: 0.0

Action path:

Statement: Given that in state 114 the agent chose EAST in what state would it chose NORTH?   
In state 102 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 474, 474

Loss function value: 0.0

Action path:

Statement: Given that in state 474 the agent chose PICKUP in what state would it chose NORTH?   
In state 462 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 474, 474, 374, 274

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 474 the agent chose PICKUP in what state would it chose EAST?   
In state 266 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 0

State Path: 352, 352, 252, 152

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 352 the agent chose NORTH in what state would it chose SOUTH?   
In state 152:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 352, 352

Loss function value: 0.0

Action path:

Statement: Given that in state 352 the agent chose NORTH in what state would it chose WEST?   
In state 348 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 217, 217, 117

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 217 the agent chose EAST in what state would it chose SOUTH?   
In state 117:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 217, 217, 317

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 217 the agent chose EAST in what state would it chose NORTH?   
In state 317:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 1

State Path: 113, 113

Loss function value: 0.0

Action path:

Statement: Given that in state 113 the agent chose SOUTH in what state would it chose NORTH?   
In state 101 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 3

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 113, 113, 13

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 113 the agent chose SOUTH in what state would it chose EAST?   
In state 13:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 282, 282, 262

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 282 the agent chose WEST in what state would it chose SOUTH?   
In state 274 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 282, 282

Loss function value: 0.0

Action path:

Statement: Given that in state 282 the agent chose WEST in what state would it chose NORTH?   
In state 286 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 0

State Path: 216, 216, 236, 256, 156

Loss function value: 0.85

Action path: EAST, EAST, NORTH

Statement: Given that in state 216 the agent chose NORTH in what state would it chose SOUTH?   
In state 156:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 1

State Path: 477, 477, 497

Loss function value: 0.95

Action path: EAST

Statement: Given that in state 477 the agent chose EAST in what state would it chose NORTH?   
In state 497:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 3

State Path: 311, 311

Loss function value: 0.0

Action path:

Statement: Given that in state 311 the agent chose SOUTH in what state would it chose NORTH?   
In state 303 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 122, 122

Loss function value: 0.0

Action path:

Statement: Given that in state 122 the agent chose WEST in what state would it chose SOUTH?   
In state 126 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 122, 122, 102

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 122 the agent chose WEST in what state would it chose NORTH?   
In state 102:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 142, 142, 242, 342

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 142 the agent chose SOUTH in what state would it chose NORTH?   
In state 346 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 142, 142

Loss function value: 0.0

Action path:

Statement: Given that in state 142 the agent chose SOUTH in what state would it chose EAST?   
In state 146 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 269, 269

Loss function value: 0.0

Action path:

Statement: Given that in state 269 the agent chose WEST in what state would it chose SOUTH?   
In state 273 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 1

State Path: 269, 269, 369

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 269 the agent chose WEST in what state would it chose NORTH?   
In state 369:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 269, 269, 249

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 269 the agent chose WEST in what state would it chose EAST?   
In state 253 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 138, 138, 118

Loss function value: 0.95

Action path: WEST

Statement: Given that in state 138 the agent chose WEST in what state would it chose SOUTH?   
In state 118:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 138, 138, 238, 338

Loss function value: 0.9

Action path: SOUTH, SOUTH

Statement: Given that in state 138 the agent chose WEST in what state would it chose NORTH?   
In state 338:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 291, 291, 191, 91

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 291 the agent chose WEST in what state would it chose SOUTH?   
In state 91:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 291, 291

Loss function value: 0.0

Action path:

Statement: Given that in state 291 the agent chose WEST in what state would it chose NORTH?   
In state 287 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 498, 498, 398

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 498 the agent chose WEST in what state would it chose NORTH?   
In state 398:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

No counterfactual found for target EAST

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 86, 86

Loss function value: 0.0

Action path:

Statement: Given that in state 86 the agent chose PICKUP in what state would it chose SOUTH?   
In state 94 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 86, 86

Loss function value: 0.0

Action path:

Statement: Given that in state 86 the agent chose PICKUP in what state would it chose WEST?   
In state 82 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 199, 199, 299

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 199 the agent chose WEST in what state would it chose SOUTH?   
In state 299:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 199, 199, 299, 279, 259, 359

Loss function value: 0.8

Action path: SOUTH, WEST, WEST, SOUTH

Statement: Given that in state 199 the agent chose WEST in what state would it chose NORTH?   
In state 359:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 0

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 0

State Path: 424, 424

Loss function value: 0.0

Action path:

Statement: Given that in state 424 the agent chose EAST in what state would it chose NORTH?   
In state 428 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 2

State Path: 458, 458, 358, 258

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 458 the agent chose NORTH in what state would it chose WEST?   
In state 258:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 4

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 4

Passenger destination: 3

State Path: 459, 459, 359, 259, 279, 299, 199

Loss function value: 0.75

Action path: NORTH, NORTH, EAST, EAST, NORTH

Statement: Given that in state 459 the agent chose NORTH in what state would it chose WEST?   
In state 199:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 3

State Path: 191, 191, 91

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 191 the agent chose WEST in what state would it chose SOUTH?   
In state 91:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 2

Passenger destination: 3

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 3

State Path: 191, 191

Loss function value: 0.0

Action path:

Statement: Given that in state 191 the agent chose WEST in what state would it chose NORTH?   
In state 187 where the passanger location is now Green:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 441, 441

Loss function value: 0.0

Action path:

Statement: Given that in state 441 the agent chose WEST in what state would it chose NORTH?   
In state 453 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 1

State Path: 421, 421, 321, 221

Loss function value: 0.9

Action path: NORTH, NORTH

Statement: Given that in state 421 the agent chose NORTH in what state would it chose EAST?   
In state 233 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 206, 206, 106

Loss function value: 0.95

Action path: NORTH

Statement: Given that in state 206 the agent chose EAST in what state would it chose SOUTH?   
In state 106:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 206, 206

Loss function value: 0.0

Action path:

Statement: Given that in state 206 the agent chose EAST in what state would it chose NORTH?   
In state 202 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 0

Passenger destination: 1

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 2

Passenger destination: 1

State Path: 481, 481

Loss function value: 0.0

Action path:

Statement: Given that in state 481 the agent chose NORTH in what state would it chose WEST?   
In state 489 where the passanger location is now Yellow:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 3

Passenger destination: 2

State Path: 266, 266

Loss function value: 0.0

Action path:

Statement: Given that in state 266 the agent chose EAST in what state would it chose SOUTH?   
In state 274 where the passanger location is now Blue:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 1

Passenger destination: 2

State Path: 266, 266, 366

Loss function value: 0.95

Action path: SOUTH

Statement: Given that in state 266 the agent chose EAST in what state would it chose NORTH?   
In state 366:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Factual explanation:

Passenger location: 1

Passenger destination: 2

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

Counterfactual explanation:

Passenger location: 0

Passenger destination: 2

State Path: 266, 266

Loss function value: 0.0

Action path:

Statement: Given that in state 266 the agent chose EAST in what state would it chose WEST?   
In state 262 where the passanger location is now Red:

+---------+

|R: | : :G|

| : | : : |

| : : : : |

| | : | : |

|Y| : |B: |

+---------+

CF Accuracy: 0.9385474860335196in mode ACTION\_CHANGELOC