Claims

[Claim 1]

An information processing method executed by an information processing device, comprising:

a step of acquiring movement information on a first mobile body including information on a first position through which the first mobile body is scheduled to pass in a first time slot and information on a travel direction of the first mobile body;

a step of setting, as an exclusive area in the first time slot, an area between the first position and a second position on a travel direction side of the first mobile body from the first position based on the movement information on the first mobile body; and

a step of acquiring information on a first route on which the first mobile body is scheduled to move and a second route on which the second mobile body is scheduled to move, wherein

the exclusive area is set in a manner that a second mobile body other than the first mobile body is not permitted to move within the exclusive area in a travel direction different from the travel direction of the first mobile body in the first time slot and that the second mobile body is permitted to move within the exclusive area in a travel direction identical to the travel direction of the first mobile body in the first time slot, and

in the step of setting, in a case where, on a route on the travel direction side, the second position is positioned between a first branch position at which the route on the travel direction side is branched to another route and a second branch position at which the route on the travel direction side is branched to another route next to the first branch position, an area from the first position to the second branch position is set as the exclusive area.

[Claim 2]

The information processing method according to claim 1, wherein in the step of setting, the second position is set based on a speed of the first mobile body.

[Claim 3]

The information processing method according to claim 1 or 2, wherein the exclusive area is set in a manner that the second mobile body is not

permitted to move along a route within a predetermined distance range from the exclusive area in the first time slot.

[Claim 4]

The information processing method according to any one of claims 1 to 3, wherein

in the step of setting, in a case where a section between the first position and the second position overlaps an overlapping section in which the first route and the second route overlap, an area from the first position to an end position of the overlapping section on the travel direction side of the first mobile body is set as the exclusive area.

[Claim 5]

An information processing device, comprising:

a movement information acquisition unit configured to acquire movement information on a first mobile body including information on a first position through which the first mobile body is scheduled to pass in a first time slot and information on a travel direction of the first mobile body;

a work setting unit configured to set, as an exclusive area in the first time slot, an area between the first position and a second position on a travel direction side of the first mobile body from the first position based on the movement information on the first mobile body; and

the movement information acquisition unit configured to acquire information on a first route on which the first mobile body is scheduled to move and a second route on which the second mobile body is scheduled to move, wherein

the exclusive area is set in a manner that a second mobile body other than the first mobile body is not permitted to move within the exclusive area in a travel direction different from the travel direction of the first mobile body in the first time slot and that the second mobile body is permitted to move within the exclusive area in a travel direction identical to the travel direction of the first mobile body in the first time slot, and

in the work setting unit, in a case where, on a route on the travel direction side, the second position is positioned between a first branch position at which the route on the travel direction side is branched to another route and a second branch position at which the route on the travel direction side is branched to another route next to the first branch position, an area from the first position to the second branch position is set as the exclusive area.

[Claim 6]

A program that causes a computer to execute a method executed by an information processing device:

a step of acquiring movement information on a first mobile body including information on a first position through which the first mobile body is scheduled to pass in a first time slot and information on a travel direction of the first mobile body;

a step of setting, as an exclusive area in the first time slot, an area between the first position and a second position on a travel direction side of the first mobile body from the first position based on the movement information on the first mobile body; and

a step of acquiring information on a first route on which the first mobile body is scheduled to move and a second route on which the second mobile body is scheduled to move, wherein

the exclusive area is set in a manner that a second mobile body other than the first mobile body is not permitted to move within the exclusive area in a travel direction different from the travel direction of the first mobile body in the first time slot and that the second mobile body is permitted to move within the exclusive area in a travel direction identical to the travel direction of the first mobile body in the first time slot, and

in the step of setting, in a case where, on a route on the travel direction side, the second position is positioned between a first branch position at which the route on the travel direction side is branched to another route and a second branch position at which the route on the travel direction side is branched to another route next to the first branch position, an area from the first position to the second branch position is set as the exclusive area.