WHAT IS CLAIMED IS:

1. An information processing apparatus comprising:

a calculation unit configured to calculate, for each of persons who stay in a first area included in a processing target image obtained by capturing the first area, a stay duration in which the person stays in the first area;

a specifying unit configured to specify, among the staying persons, a first person whose stay duration exceeds a predetermined duration; and

an output unit configured to output a notification about the first person specified by the specifying unit,

further comprising:

obtaining unit configured to obtain information of time, for each of the persons who stay in the first area, when the person exited from a second area to the first area, wherein the second area is different from the first area and to which respective time slots in which each of the persons who stay in the first area is permitted to stay is assigned,

wherein the calculation unit calculates using the information of time obtained by the obtaining unit, as the stay duration, a first stay duration after each person exits, to the first area, from the second area.

2. The apparatus according to claim 1, wherein the calculation unit calculates the first stay duration based on a difference between current time and time at which each person exits from the second area to the first area based on the information of the time obtained by the obtaining unit.

3. The apparatus according to claim 2, wherein if the time at which each person exits from the second area to the first area cannot be specified, the calculation unit calculates the first stay duration based on a difference between the current time and end time of the time slot in which the person is permitted to stay in the second area.

4. The apparatus according to claim 2, wherein the time at which each person exits is based on one of

capturing time of an image captured when the person exits from the second area to the first area, and

time at which the person passes through a side gate from the second area to the first area.

5. The apparatus according to claim 1, wherein the calculation unit further calculates, as the

stay duration, a second stay duration in which each person stays in the first area during a time period from when the person completes, in the first area, a procedure for entering the second area until the person enters the second area.

6. The apparatus according to claim 5, wherein the calculation unit calculates the second stay duration as a time in which the person stays in the first area even after the procedure is completed and current time exceeds time at which the person is permitted to enter the second area.

7. The apparatus according to claim 1, wherein the calculation unit further calculates, as the stay duration, a third stay duration in which each person stays in the first area before a procedure for entering the second area is performed in the first area.

8. The apparatus according to claim 1, wherein

the specifying unit ranks the person specified as the first person in accordance with a length of the stay duration, and

the output unit includes information about the rank in the notification.

9. The apparatus according to claim 1, wherein if the processing target image includes a person of a first type registered in advance, the specifying unit specifies the person of the first type as the first person.

10. The apparatus according to claim 9, wherein the person of the first type is a person who has been specified as the first person in the past.

11. The apparatus according to claim 1, wherein if the processing target image includes a person of a second type registered in advance, the calculation unit excludes the person of the second type from a target whose stay duration is calculated.

12. The apparatus according to claim 1, wherein if the same person as the person specified as the first person by the specifying unit has been specified as the first person in the past, the notification includes information about the past specification.

13. The apparatus according to claim 1, wherein the output unit outputs the notification as information that can be superimposed and displayed on an image obtained by capturing the first area.

14. The apparatus according to claim 1, wherein

the first area is an area where an arbitrary person can stay, and

the second area is an area where only a permitted person can enter.

15. A monitoring system comprising:

an image capturing apparatus configured to generate an image by capturing a predetermined space including a first area and generate a processing target image by extracting a region of a person included in the image;

an information processing apparatus including

a calculation unit configured to calculate, for each of persons who stay in a first area included in the processing target image obtained by capturing the first area, a stay duration in which the person stays in the first area,

a specifying unit configured to specify, among the staying persons, a first person whose stay duration exceeds a predetermined duration, and

an output unit configured to output a notification about the first person specified by the specifying unit,

further comprising:

obtaining unit configured to obtain information of time, for each of the persons who stay in the first area, when the person exited from a second area to the first area, wherein the second area is different from the first area and to which respective time slots in which each of the persons who stay in the first area is permitted to stay is assigned,

wherein the calculation unit calculates using the information of time obtained by the obtaining unit, as the stay duration, a first stay duration after each person exits, to the first area, from the second area; and

a display device configured to receive and display the notification output by the output unit of the information processing apparatus.

16. A control method for an information processing apparatus, comprising:

calculating, for each of persons who stay in a first area included in a processing target image obtained by capturing the first area, a stay duration in which the person stays in the first area;

causing a specifying unit to specify, among the staying persons, a first person whose stay duration exceeds a predetermined duration; and

causing an output unit to output a notification about the first person specified in the causing the specifying unit,

further comprising:

obtaining information of time, for each of the persons who stay in the first area, when the person exited from a second area to the first area, wherein the second area is different from the first

area and to which respective time slots in which each of the persons who stay in the first area is permitted to stay is assigned,

wherein in the calculating, a first stay duration after each person exits, to the first area, from the second area is calculated as the stay duration using the information of time obtained in the obtaining.

17. A non-transitory computer-readable storage medium storing a program that, when executed by a processor of an information processing apparatus, causes a processor to perform:

calculating, for each of persons who stay in a first area included in a processing target image obtained by capturing the first area, a stay duration in which the person stays in the first area;

causing a specifying unit to specify, among the staying persons, a first person whose stay duration exceeds a predetermined duration; and

causing an output unit to output a notification about the first person specified in the causing the specifying unit,

further comprising:

obtaining information of time, for each of the persons who stay in the first area, when the person exited from a second area to the first area, wherein the second area is different from the first area and to which respective time slots in which each of the persons who stay in the first area is permitted to stay is assigned,

wherein in the calculating, a first stay duration after each person exits, to the first area, from the second area is calculated as the stay duration using the information of time obtained in the obtaining.