WHAT IS CLAIMED IS:

1. An elevator user detection system comprising a camera disposed in a car, including a lens for capturing an image of an inside of the car and an image of a hall from the inside of the car, the system comprising:

a detection area setting unit configured to set at least two detection areas with respect to the inside of the car and the hall on an image captured by the camera;

a detection processing unit configured to execute a detection process related to a drive operation of the car for each of the at least two detection areas set by the detection area setting unit; and

a controller configured to execute different response processes for the at least two detection areas, respectively, based on detection results of the detection processing unit, the different response processes including at least drive control of the car and open/close control of a door of the car.

2. The elevator user detection system of claim 1, wherein the camera is configured to capture an image of the entirety of the inside of the car and an image of the hall near a doorway of the car.

3. The elevator user detection system of claim 1, wherein the detection process related to the drive operation of the car includes a detection process of a user or an object during a door opening/closing operation of the car.

4. The elevator user detection system of claim 1, wherein the detection process related to the drive operation of the car includes a detection process of a user or an object during an upward/downward movement of

the car.

5. The elevator user detection system of claim 1, wherein the detection process related to the drive operation of the car includes a detection process of a user or an object while the car is stopped.

6. The elevator user detection system of claim 1, wherein

the detection area setting unit is configured to set at least a first detection area on a floor surface of the car and a second detection area near the door of the car, and

the detection processing unit is configured to detect a riding condition of users in the car based on an image of the first detection area, and to predict a user getting caught by the door based on an image of the second detection area.

7. The elevator user detection system of claim 2 or 3, wherein

the detection area setting unit is configured to set at least a third detection area near the doorway of the car and a fourth detection area near the doorway of the car in the hall, and

the detection processing unit is configured to detect a waiting condition of users in the hall based on an image of the third detection area, and to detect users approaching of the doorway of the car based on an image of the fourth detection area.

8. The elevator user detection system of claim 1, wherein the camera is disposed in an upper part of the doorway of the car.

9. The elevator user detection system of claim 1, wherein the response processes include a notification process of giving a warning to a user in the car.