CLAIMS

1. An alarm method for a tabletop game, comprising:

acquiring at least one frame of game tabletop image collected in a prop operation stage of a game;

detecting, for each frame in the at least one frame of game tabletop image, a placement position of a preset identity object in the game tabletop image, a tabletop of the game comprising a placement region corresponding to each game party in at least two game parties, and the preset identity object being placed by a game controller and configured to identify a first game party allowed to operate a game prop;

determining a second game party corresponding to the placement position of the preset identity object according to the placement region corresponding to the each game party; and

outputting, in a case where the first game party is inconsistent with the second game party, alarm information for characterizing a placement error of the preset identity object~~.~~;

wherein the placement position is located within a first prop operation region or a second prop operation region, the first prop operation region comprises a region where the game controller operates a game prop, the second prop operation region comprises regions where the at least two game parties operate a game prop.

2. The method of claim 1, wherein determining the second game party corresponding to the placement position of the preset identity object according to the placement region corresponding to the each game party comprises:

determining, in a case where the placement position is not within the~~a~~ first prop operation region, the second game party corresponding to the placement position of the preset identity object according to the placement region corresponding to the each game party~~,~~

~~wherein the first prop operation region comprises a region where a game controller operates a game prop~~.

3. The method of claim 1, wherein after outputting the alarm information for characterizing the placement error of the preset identity object, the method further comprises:

removing, in a case of detecting that the first game party is consistent with the second game party in an image after a first image in the at least one frame of game tabletop image, the alarm information for characterizing the placement error of the preset identity object,

wherein the first image is an image of detecting that the first game party is inconsistent with the second game party in the at least one frame of game tabletop image.

4. The method of claim 2, wherein the method further comprises:

detecting, in a case where the placement position is within the first prop operation region, a position of the game prop based on the at least one frame of game tabletop image; and

outputting, in response to that the position of the game prop is not within the first prop operation region, alarm information for characterizing an operation error of the game prop.

5. The method of claim 4, wherein after outputting the alarm information for characterizing the operation error of the game prop, the method further comprises:

removing, in a case of detecting that the position of the game prop is within the first prop operation region in an image after a second image in the at least one frame of game tabletop image, the alarm information for characterizing the operation error of the game prop,

wherein the second image is an image of detecting that the position of the game prop is not within the first prop operation region in the at least one frame of game tabletop image.

6. The method of claim 4, wherein the first prop operation region comprises at least two first sub-operation regions in one-to-one correspondence with the at least two game parties, and

the method further comprises:

outputting, in a case where a first sub-operation region where the placement position is located does not have the game prop, alarm information for characterizing an operation error of a game prop of a target game party, the target game party being a game party corresponding to the first sub-operation region where the placement position is located.

7. The method of claim 6, wherein after outputting the alarm information for characterizing the operation error of the game prop of the target game party, the method further comprises:

removing, in a case of detecting that the first sub-operation region where the placement position is located has the game prop in an image after a third image in the at least one frame of game tabletop image, the alarm information for characterizing the operation error of the game prop of the target game party,

wherein the third image is an image of detecting that the first sub-operation region where the placement position is located does not have the game prop in the at least one frame of game tabletop image.

8. The method of claim 2, wherein the first prop operation region comprises at least two first sub-operation regions in one-to-one correspondence with the at least two game parties, and the method further comprises:

detecting, in a case where the placement position is within the~~a~~ second prop operation region, a position of the game prop based on the at least one frame of game tabletop image~~, wherein the second prop operation region comprises a region where the at least two game parties operate the game prop~~;

detecting, in a case where the position of the game prop is within a first sub-operation region corresponding to the first game party, a state of an identity face of the game prop based on the at least one frame of game tabletop image; and

outputting, in a case where the state of the identity face of the game prop is a readable state, alarm information for characterizing an operation error of the game prop.

9. The method of claim 8, wherein after outputting the alarm information for characterizing the operation error of the game prop, the method further comprises:

removing, in a case of detecting that the game prop is recycled in an image after a fourth image in the at least one frame of game tabletop image, the alarm information for characterizing the operation error of the game prop,

wherein the fourth image is an image of detecting that the state of the identity face of the game prop is the readable state in the at least one frame of game tabletop image.

10. The method of claim 8, wherein the method further comprises:

detecting, in a case where the position of the game prop is within the second game operation region, and the first game party is consistent with the second game party, a token in a placement region corresponding to the first game party based on the at least one frame of game tabletop image; and

outputting, in a case where the placement region corresponding to the first game party does not have the token, alarm information for characterizing that the token is not placed.

11. The method of claim 10, wherein after outputting the alarm information for characterizing that the token is not placed, the method further comprises:

removing, in a case of detecting that the placement region corresponding to the first game party has the token in an image after a fifth image in the at least one frame of game tabletop image, the alarm information for characterizing that the token is not placed,

wherein the fifth image is an image that the token is not detected in the placement region corresponding to the first game party in the at least one frame of game tabletop image.

12. The method of claim 10, wherein the method further comprises:

detecting a distance between the preset identity object and the game prop based on the at least one frame of game tabletop image; and

outputting, in a case where the distance exceeds a preset threshold, alarm information for characterizing that the game prop is not placed to a specified position.

13. The method of claim 12, wherein after outputting the alarm information for characterizing that the game prop is not placed to the specified position, the method further comprises:

removing, in a case of detecting that the distance does not exceed the preset threshold in an image after a sixth image in the at least one frame of game tabletop image, the alarm information for characterizing that the game prop is not placed to the specified position,

wherein the sixth image is an image of detecting that the distance exceeds the preset threshold in the at least one frame of game tabletop image.

14. An alarm apparatus for a tabletop game, comprising:

an acquisition module, configured to acquire at least one frame of game tabletop image collected in a prop operation stage of a game;

a detection module, configured to detect, for each frame in the at least one frame of game tabletop image, a placement position of a preset identity object in the game tabletop image, a tabletop of the game comprising a placement region corresponding to each game party in at least two game parties, and the preset identity object being placed by a game controller and configured to identify a first game party allowed to operate a game prop; and determine a second game party corresponding to the placement position of the preset identity object according to the placement region corresponding to the each game party; and

an alarm module, configured to output, in a case where the first game party is inconsistent with the second game party, alarm information for characterizing a placement error of the preset identity object.;

wherein the placement position is located within a first prop operation region or a second prop

operation region, the first prop operation region comprises a region where the game controller operates a game prop, the second prop operation region comprises regions where the at least two game parties operate a game prop.

15. The apparatus of claim 14, wherein

the detection module is specifically configured to determine, in a case where the placement position is not within thea first prop operation region, the second game party corresponding to the placement position of the preset identity object according to the placement region corresponding to the each game party~~, wherein the first prop operation region comprises a region where a game controller operates a game prop~~.

16. The apparatus of claim 15, wherein

the detection module is further configured to detect, in a case where the placement position is within the first prop operation region, a position of the game prop based on the at least one frame of game tabletop image; and

the alarm module is further configured to output, in response to that the position of the game prop is not within the first prop operation region, alarm information for characterizing an operation error of the game prop.

17. The apparatus of claim 16, wherein the first prop operation region comprises at least two first sub-operation regions in one-to-one correspondence with the at least two game parties; and

the alarm module is further configured to output, in a case where a first sub-operation region where the placement position is located does not have the game prop, alarm information for characterizing an operation error of a game prop of a target game party, the target game party being a game party corresponding to the first sub-operation region where the placement position is located.

18. An electronic device, comprising a processor, a memory and a communication bus, wherein

the communication bus is configured to implement connection and communication between the processor and the memory; and

the processor is configured to execute one or more programs stored in the memory, to implement the alarm method for the tabletop game of any one of claims 1 to 13.

19. A computer-readable storage medium, storing one or more programs, wherein the one or more programs are able to be executed by one or more processors, to implement the alarm method for the tabletop game of any one of claims 1 to 13.

20. A computer program, stored in a memory; wherein the computer program, when executed by a processor, implements alarm method for the tabletop game of any one of claims 1 to 13.