

What is claimed is:

1. A triggering method of an intervention prompt on the basis of user smoking behavior records, comprising:

receiving smoking behavior record data associated with a user, wherein the smoking behavior record data includes a plurality of smoking behavior records;

analyzing the smoking behavior record data to determine smoking behavior location data associated with each of the plurality of smoking behavior records;

calculating a distance between locations indicated by every two smoking behavior location data;

recording a first number of smoking behavior records in which the distance is less than a first distance as a set of smoking behavior record data;

in a case where the first number is greater than a first threshold, determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range includes a consecutive communicating area or space and includes locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data; and

triggering pushing of the intervention prompt if the user enters the prompt range from the outside.

2. The triggering method according to claim 1, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data further comprises:

computing a physical center point of the smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range includes a range centering on the physical center point and having a radius of a second distance, and the second distance is not less than a distance between the physical center point and a smoking behavior location that is farthest from the physical center point and indicated by the set of smoking behavior record data.

3. The triggering method according to claim 1, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data further comprises:

determining a first prompt range on the basis of each of the locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range consists of a plurality of the first prompt ranges.

4. The triggering method according to any one of claims 1-3, wherein the triggering method further comprises:

analyzing the smoking behavior record data and determining smoking behavior time data associated with the respective smoking behavior record data;

calculating a smoking count in a predetermined time period on the basis of the smoking behavior time data;

recording the predetermined time period in which the smoking count is greater than a second threshold; and

triggering pushing of the intervention prompt before a start time point of the predetermined time period.

5. The triggering method according to any one of claims 1-3, wherein the triggering method further comprises:

- analyzing the smoking behavior record data and determining smoking behavior time data associated with the respective smoking behavior record data;

- calculating smoking counts in predetermined time periods on the basis of the smoking behavior time data;

- ranking the predetermined time periods in a descending order according to the smoking counts; and

- triggering pushing of the intervention prompts before start time points of a predetermined number of highest-ranking predetermined time periods.

6. The triggering method according to any one of claims 1-3, wherein the form of the intervention prompt includes a voice prompt, a video prompt, an image prompt, and a text prompt, and the form of the intervention prompt is related to specific time indicated by the predetermined time period.

7. The triggering method according to any one of claims 1-3, the triggering method further comprising:

- receiving user data associated with the user;

- determining a nicotine dependence degree of the user on the basis of the user data; and

- determining the type of the intervention prompt on the basis of the nicotine dependence degree of the user, wherein the type of the intervention prompt includes a positive message, a neutral message, and a negative message.

8. A triggering apparatus of an intervention prompt on the basis of user smoking behavior records, the triggering apparatus comprising:

- a data receiving module, configured to receive smoking behavior record data associated with a user, wherein the smoking behavior record data includes a plurality of smoking behavior records;

- an analysis module, configured to analyze the smoking behavior record data to determine smoking behavior location data associated with each of the plurality of smoking behavior records;

- a first calculation module, configured to calculate a distance between locations indicated by every two smoking behavior location data;

- a grouping module, configured to record a first number of smoking behavior records in which the distance is less than a first distance as a set of smoking behavior record data;

- a second calculation module, configured to, in a case where the first number is greater than a first threshold, determine a prompt range on the basis of location data associated with the set of smoking behavior record data, wherein the prompt range includes a consecutive communicating area or space and includes locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data; and

- a trigger module, configured to trigger pushing of the intervention prompt if the user enters the prompt range from the outside.

9. The triggering apparatus according to claim 8, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data comprises:

computing a physical center point of the smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range includes a range centering on the physical center point and having a radius of a second distance, and the second distance is not less than a distance between the physical center point and a smoking behavior location that is farthest from the physical center point and indicated by the set of smoking behavior record data.

10. The triggering apparatus according to claim 8, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data comprises:

determining a first prompt range on the basis of each of the locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range consists of a plurality of the first prompt ranges.

11. The triggering apparatus according to any one of claims 8-10, wherein the analysis module is further configured to analyze the smoking behavior record data and determine smoking behavior time data associated with the respective smoking behavior record data; the first calculation module is further configured to calculate a smoking count in a predetermined time period on the basis of the smoking behavior time data; and the triggering apparatus further comprises:

a recording module, configured to record the predetermined time period in which the smoking count is greater than a second threshold; and

a first time trigger module, configured to trigger pushing of the intervention prompt before a start time point of the predetermined time period.

12. The triggering apparatus according to any one of claims 8-10, wherein the analysis module is further configured to analyze the smoking behavior record data and determine smoking behavior time data associated with the respective smoking behavior record data; the first calculation module is further configured to calculate smoking counts in predetermined time periods on the basis of the smoking behavior time data; and the triggering apparatus further comprises:

a ranking module, configured to rank the predetermined time periods in a descending order according to the smoking counts; and

a second time trigger module, configured to trigger pushing of the intervention prompts before start time points of a predetermined number of highest-ranking predetermined time periods.

13. The triggering apparatus according to any one of claims 8-10, wherein the form of the intervention prompt includes a voice prompt, a video prompt, an image prompt, and a text prompt, and the form of the intervention prompt is related to specific time indicated by the predetermined time period.

14. The triggering apparatus according to any one of claims 8-10, wherein the data receiving module is further configured to receive user data associated with the user; and the triggering apparatus further comprises:

a third calculation module, configured to determine a nicotine dependence degree of the user on the basis of the user data; and

an intervention prompt type determination module, configured to determine the type of the intervention prompt on the basis of the nicotine dependence degree of the user, wherein the type of the intervention prompt includes a positive message, a neutral message, and a negative message.

15. A tangible computer-readable storage medium, the storage medium including instructions for performing a triggering method of an intervention prompt on the basis of user smoking behavior records, the instructions, when executed, causing a processor of a computer to be at least used to:

receive smoking behavior record data associated with a user, wherein the smoking behavior record data includes a plurality of smoking behavior records;

analyze the smoking behavior record data to determine smoking behavior location data associated with each of the plurality of smoking behavior records;

calculate a distance between locations indicated by every two smoking behavior location data;

record a first number of smoking behavior records in which the distance is less than a first distance as a set of smoking behavior record data;

in a case where the first number is greater than a first threshold, determine a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range includes a consecutive communicating area or space and includes locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data; and

trigger pushing of the intervention prompt if the user enters the prompt range from the outside.

16. The computer-readable storage medium according to claim 15, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data comprises:

computing a physical center point of the smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range includes a range centering on the physical center point and having a radius of a second distance, and the second distance is not less than a distance between the physical center point and a smoking behavior location that is farthest from the physical center point and indicated by the set of smoking behavior record data.

17. The computer-readable storage medium according to claim 15, wherein determining a prompt range on the basis of the smoking behavior location data associated with the set of smoking behavior record data comprises:

determining a first prompt range on the basis of each of the locations indicated by the respective smoking behavior location data associated with the set of smoking behavior record data, wherein the prompt range consists of a plurality of the first prompt ranges.

18. The computer-readable storage medium according to any one of claims 15-17, wherein the instructions, when executed, further cause the processor of the computer to be at least used to:

analyze the smoking behavior record data and determine smoking behavior time data associated with the respective smoking behavior record data;

calculate a smoking count in a predetermined time period on the basis of the smoking behavior time data;

record the predetermined time period in which the smoking count is greater than a second threshold; and

trigger pushing of the intervention prompt before a start time point of the predetermined time period.

19. The computer-readable storage medium according to any one of claims 15-17, wherein the instructions, when executed, further cause the processor of the computer to be at least used to:

analyze the smoking behavior record data and determine smoking behavior time data associated with the respective smoking behavior record data;

calculate smoking counts in predetermined time periods on the basis of the smoking behavior time data;

rank the predetermined time periods in a descending order according to the smoking counts; and

trigger pushing of the intervention prompts before start time points of a predetermined number of highest-ranking predetermined time periods.

20. The computer-readable storage medium according to any one of claims 15-17, wherein the form of the intervention prompt includes a voice prompt, a video prompt, an image prompt, and a text prompt, and the form of the intervention prompt is related to specific time indicated by the predetermined time period.

21. The computer-readable storage medium according to any one of claims 15-17, wherein the instructions, when executed, further cause the processor of the computer to be at least used to:

receive user data associated with the user;

determine a nicotine dependence degree of the user on the basis of the user data; and

determine the type of the intervention prompt on the basis of the nicotine dependence degree of the user, wherein the type of the intervention prompt includes a positive message, a neutral message, and a negative message.