

Claims

1. A method of performing an audio information query, comprising:
 at an electronic device with one or more processors, memory, and a display:
 detecting a first trigger event;
 in response to detecting the first trigger event, collecting a audio sample of environmental audio data with a microphone of the electronic device, wherein the environmental audio data is associated with a media item;
 transmitting information corresponding to the audio sample to a server;
 in response to transmitting the information corresponding to the audio sample to the server, obtaining attribute information corresponding to the audio sample returned by the server, wherein the attribute information includes metadata corresponding to the media item, a time indicator corresponding to a position of the audio sample relative to the media item, and stream information associated with the media item;
 displaying at least a portion of the attribute information on the display;
 detecting a second trigger event; and
 in response to detecting the second trigger event:
 determining a last obtained time indicator for the media item;
 streaming the media item based on the stream information in the received attribute information; and
 presenting the media item from the last obtained time indicator.
2. The method of claim 1, wherein the first trigger event is detected when an accelerometer of the electronic device detects a change in gravity in excess of a predefined threshold.
3. The method of any of claims 1-2, wherein the media item is a song, and wherein at least a portion of the metadata associated with the media item includes lyrics corresponding to the song; and the method, including:
 after obtaining the attribute information, automatically displaying on the display a first portion of the lyrics for the song corresponding to the time indicator in a primary display position in a first region, wherein the portion of the lyrics corresponds to the time indicator.
4. The method of claim 3, including:
 ceasing to display the first portion of the lyrics in the primary display position;
 fading out the first portion of the lyrics;
 displaying a second portion of the lyrics in the primary display position, wherein the second portion of the lyrics is different from and subsequent to the first portion; and
 fading in a third portion of the lyrics, wherein the third portion of the lyrics is different from the first and second portions and subsequent to the second portion.
5. The method of claim 4, including, displaying a focus indicator, wherein the focus indicator is configured to draw a user's attention to a current word of the song.

6. The method of any of claims 3-5, wherein the metadata associated with the media item includes descriptive information corresponding to the song; and

the method, including:

while displaying the first portion of the lyrics the primary display position in the first region, concurrently displaying on the display the descriptive information in a second region distinct from the first region.

7. The method of claim 6, wherein the descriptive information corresponding to the song includes one or more of a title, an artist name, a release date, an album name, and an album cover image.

8. An electronic device comprising:

one or more processors;

a display; and

memory storing one or more programs to be executed by the one or more processors, the one or more programs comprising instructions for:

detecting a first trigger event;

in response to detecting the first trigger event, collecting a audio sample of environmental audio data with a microphone of the electronic device, wherein the environmental audio data is associated with a media item;

transmitting information corresponding to the audio sample to a server;

in response to transmitting the information corresponding to the audio sample to the server, obtaining attribute information corresponding to the audio sample returned by the server, wherein the attribute information includes metadata corresponding to the media item, a time indicator corresponding to a position of the audio sample relative to the media item, and stream information associated with the media item;

displaying at least a portion of the attribute information on the display;

detecting a second trigger event; and

in response to detecting the second trigger event:

determining a last obtained time indicator for the media item;

streaming the media item based on the stream information in the received attribute information; and

presenting the media item from the last obtained time indicator.

9. The electronic device of claim 8, wherein the first trigger event is detected when an accelerometer of the electronic device detects a change in gravity in excess of a predefined threshold.

10. The electronic device of any of claims 8-9, wherein:

the media item is a song, and wherein at least a portion of the metadata associated with the media item includes lyrics corresponding to the song; and

the one or more programs further comprise instructions for:

after obtaining the attribute information, automatically displaying on the display a first portion of the lyrics for the song corresponding to the time indicator in a primary display position in a first region, wherein the portion of the lyrics corresponds to the time indicator.

11. The electronic device of claim 10, wherein the one or more programs further comprise instructions for:

ceasing to display the first portion of the lyrics in the primary display position;

fading out the first portion of the lyrics;

displaying a second portion of the lyrics in the primary display position, wherein the second portion of the lyrics is different from and subsequent to the first portion; and

fading in a third portion of the lyrics, wherein the third portion of the lyrics is different from the first and second portions and subsequent to the second portion.

12. The electronic device of claim 11, wherein the one or more programs further comprise instructions for displaying a focus indicator, wherein the focus indicator is configured to draw a user's attention to a current word of the song.

13. The electronic device of any of claims 10-12, wherein:

the metadata associated with the media item includes descriptive information corresponding to the song; and

the one or more programs further comprise instructions for:

while displaying the first portion of the lyrics the primary display position in the first region, concurrently displaying on the display the descriptive information in a second region distinct from the first region.

14. A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which, when executed by an electronic device with one or more processors and a display, cause the device to perform operations comprising:

detecting a first trigger event;

in response to detecting the first trigger event, collecting a audio sample of environmental audio data with a microphone of the electronic device, wherein the environmental audio data is associated with a media item;

transmitting information corresponding to the audio sample to a server;

in response to transmitting the information corresponding to the audio sample to the server, obtaining attribute information corresponding to the audio sample [returned by the server](#), wherein the attribute information includes metadata corresponding to the media item, a time indicator corresponding to a position of the audio sample relative to the media item, and stream information associated with the media item;

displaying at least a portion of the attribute information on the display;

detecting a second trigger event; and

in response to detecting the second trigger event:

determining a last obtained time indicator for the media item;
streaming the media item based on the stream information in the received attribute information; and

presenting the media item from the last obtained time indicator.

15. The non-transitory computer readable storage medium of claim 14, wherein the first trigger event is detected when an accelerometer of the electronic device detects a change in gravity in excess of a predefined threshold.

16. The non-transitory computer readable storage medium of any of claims 14-15, wherein:
the media item is a song, and wherein at least a portion of the metadata associated with the media item includes lyrics corresponding to the song; and

the one or more programs further comprise instructions which cause the device to perform operations comprising:

after obtaining the attribute information, automatically displaying on the display a first portion of the lyrics for the song corresponding to the time indicator in a primary display position in a first region, wherein the portion of the lyrics corresponds to the time indicator.

17. The non-transitory computer readable storage medium of claim 16, wherein the one or more programs further comprise instructions which cause the device to perform operations comprising:

ceasing to display the first portion of the lyrics in the primary display position;

fading out the first portion of the lyrics;

displaying a second portion of the lyrics in the primary display position, wherein the second portion of the lyrics is different from and subsequent to the first portion; and

fading in a third portion of the lyrics, wherein the third portion of the lyrics is different from the first and second portions and subsequent to the second portion.

18. The non-transitory computer readable storage medium of claim 17, wherein the one or more programs further comprise instructions which cause the device to perform operations comprising displaying a focus indicator, wherein the focus indicator is configured to draw a user's attention to a current word of the song.

19. The non-transitory computer readable storage medium of any of claims 16-18, wherein:
the metadata associated with the media item includes descriptive information corresponding to the song; and

the one or more programs further comprise instructions which cause the device to perform operations comprising:

while displaying the first portion of the lyrics the primary display position in the first region, concurrently displaying on the display the descriptive information in a second region distinct from the first region.