## CLAIMS

What is claimed is:

1. A method for generating lyrics, comprising:

acquiring a second lyric file of a target song, wherein the second lyric file comprises lyrics of the target song and display times of a plurality of characters of the lyrics, the characters and the display times have one-to-one correspondence, and each character and the display time of the character in the second lyric file are spliced and stored;

establishing a first array and a third array, writing the plurality of characters into the first array, writing the display times of the plurality of characters into the third array, and determining the plurality of characters in the first array as the lyrics of the target song;

determining a character to be annotated in the plurality of characters of the lyrics;

querying, based on a predetermined query rule and according to a word to which the character to be annotated belongs, a pronunciation of the character to be annotated in the word, and determining the pronunciation of the character to be annotated in the word as a pronunciation of the character to be annotated in the target song; and

generating a first lyric file of the target song according to the plurality of characters and the corresponding pronunciation of the character to be annotated in the target song.

2. The method according to claim 1, wherein querying, based on the predetermined query rule and according to the word to which the character to be annotated belongs, the pronunciation of the character to be annotated in the word comprises:

performing phrase partitioning for the plurality of characters to determine a plurality of phrases, the plurality of phrases comprising the character to be annotated;

inputting the plurality of phrases into a dictionary engine, the dictionary engine comprising a plurality of characters and pronunciations thereof;

performing a character-by-character increase query on the plurality of phrases to

acquire a plurality of candidate words matching the word to which the character to be annotated belongs; and

screening out a candidate word having a maximum quantity of characters from the plurality of candidate words according to quantities of characters included in the plurality of candidate words, and outputting the pronunciation of the character to be annotated in the candidate word having the maximum quantity of characters, each candidate word at least comprising characters of the word to which the character to be annotated belongs.

3. The method according to claim 1, wherein querying, based on the predetermined query rule and according to the word to which the character to be annotated belongs, the pronunciation of the character to be annotated in the word comprises:

performing phrase partitioning for the plurality of characters to determine a plurality of phrases, the plurality of phrases comprising the character to be annotated and a voice key character of the character to be annotated;

inputting the plurality of phrases into a dictionary engine, the dictionary engine comprising a plurality of characters and pronunciations thereof;

performing a character-by-character increase query on the plurality of phrases to acquire a plurality of candidate words matching the word to which the character to be annotated belongs; and

screening out a candidate word having a maximum quantity of characters from the plurality of candidate words and having the same voice as the character to be annotated according to quantities of characters included in the plurality of candidate words and a voice key character of the character to be annotated, and outputting the pronunciation of the character to be annotated in the candidate word having the maximum quantity of characters having the same voice as the character to be annotated, each candidate word at least comprising characters of the word to which the character to be annotated belongs.

4. The method according to claim 1, wherein the character to be annotated

comprises: a Chinese simplified character, a Chinese traditional character, a Chinese simplified character used in Japanese, and a Chinese traditional character used in Japanese.

5. The method according to claim 1, wherein generating the first lyric file of the target song according to the plurality of characters and the corresponding pronunciation of the character to be annotated in the target song comprises:

establishing a second array, and writing the corresponding pronunciation of the character to be annotated in the target song into the second array;

if a target word is present in the lyrics, determining a display time of the target word according to the display times of at least two adjacent characters to be annotated included in the target word, the target word comprising at least two adjacent characters to be annotated, and a quantity of characters to be annotated included in the target word being not equal to a quantity of pronunciations of the target word;

writing the display time of the target word into the third array; and

adding the first array, the second array, and the third array to the first lyric file;

wherein the display time of the target word is determined by: combining the display time of the at least two adjacent characters to be annotated included in the target word, and determining a combined display time as the display time of the target word.

6. The method according to claim 1, wherein generating the first lyric file of the target song according to the plurality of characters and the corresponding pronunciation of the character to be annotated in the target song comprises:

establishing a second array, and writing the corresponding pronunciation of the character to be annotated in the target song into the second array;

adding a first array and the second array into the first lyric file, the first array being configured to store the plurality of characters of the lyrics.

7. A method for displaying lyrics, wherein the method is applied on a terminal, and the method comprises:

upon receipt of a lyric display instruction, acquiring a first lyric file of a target song, wherein the lyric display instruction is intended to display lyrics of the target song, and the first lyric file is a lyric file generated by the method according to claim 1;

acquiring the lyrics of the target song and a corresponding pronunciation of a character to be annotated in a plurality of characters of the lyrics from the first lyric file,

displaying the plurality of characters of the lyrics;

in displaying the character to be annotated, annotating the corresponding pronunciation of the character to be annotated in the target song in a target position of the character to be annotated, the target position being defined as being over the character to be annotated.

8. The method according to claim 7, wherein the first lyric file further comprises display times of the plurality of characters; and correspondingly, displaying the plurality of characters of the lyrics comprises:

highlighting, according to a display time of a target word in the plurality of characters, a target word that is currently being played in the plurality of characters; and

highlighting, according to a display time of each character in the plurality of characters except the target word, a character that is currently being played in the plurality of characters except the target word;

wherein the target word comprises at least two adjacent characters to be annotated, a quantity of characters to be annotated included in the target word is not equal to a quantity of pronunciations of the target word, and the display time of the target word is display time obtained by combining the display time of the at least two adjacent characters to be annotated included in the target word.

9. The method according to claim 7, wherein in displaying the character to be annotated, annotating the corresponding pronunciation of the character to be annotated in the target song in the target position of the character to be annotated comprises:

in displaying the character to be annotated, highlighting, according to the display

time of the character to be annotated, a character to be annotated that is being currently played and a corresponding pronunciation of the charter to be annotated that is being currently played in the target song;

wherein the character to be annotated comprises: a Chinese simplified character, a Chinese traditional character, a Chinese simplified character used in Japanese, and a Chinese traditional character used in Japanese.

10. An apparatus for generating lyrics, comprising:

an acquiring module, comprising an acquiring unit and an establishing unit, wherein the acquiring unit is configured to acquire a second lyric file of a target song, wherein the second lyric file comprises lyrics of the target song and display times of a plurality of characters of the lyrics, the characters and the display times have one-to-one correspondence, and each character and the display time of the character in the second lyric file are spliced and stored; and the establishing unit is configured to establish a first array and a third array, write the plurality of characters into the first array, write the display times of the plurality of characters into the third array, and determine the plurality of characters in the first array as the lyrics of the target song;

a determining module, configured to determine a character to be annotated in the plurality of characters of the lyrics;

a querying module, configured to query, based on a predetermined query rule and according to a word to which the character to be annotated belongs, a pronunciation of the character to be annotated in the word, and determine the pronunciation of the character to be annotated in the word as a pronunciation of the character to be annotated in the target song; and

a generating module, configured to generate a first lyric file of the target song according to the plurality of characters and the corresponding pronunciation of the character to be annotated in the target song.

11. The apparatus according to claim 10, wherein the querying module comprises:

a determining unit, configured to perform phrase partitioning for the plurality of

characters to determine a plurality of phrases, the plurality of phrases comprising the character to be annotated;

an inputting unit, configured to input the plurality of phrases into a dictionary engine, the dictionary engine comprising a plurality of characters and pronunciations thereof;

a querying unit, configured to perform a character-by-character increase query on the plurality of phrases to acquire a plurality of candidate words matching the word to which the character to be annotated belongs; and

a screening unit, configured to screen out a candidate word having a maximum quantity of characters from the plurality of candidate words according to quantities of characters included in the plurality of candidate words, and output the pronunciation of the character to be annotated in the candidate word having the maximum quantity of characters, each candidate word at least comprising characters of the word to which the character to be annotated belongs.

12. An apparatus for displaying lyrics, the apparatus being applied on a terminal, and the apparatus comprising:

an acquiring module, configured to, upon receipt of a lyric display instruction, acquire a first lyric file of a target song, wherein the lyric display instruction is intended to display lyrics of the target song, and the first lyric file is a lyric file generated by the method according to claim 1;

wherein the acquiring module is configured to acquire the lyrics of the target song and a corresponding pronunciation of a character to be annotated in a plurality of characters of the lyrics from the first lyric file;

a displaying module, configured to display the plurality of characters of the lyrics;

an annotating module, configured to, in displaying the character to be annotated, annotate the corresponding pronunciation of the character to be annotated in the target song in a target position of the character to be annotated, the target position being defined as being over the character to be annotated.

13. An electronic device, comprising a processor and a memory with at least one instruction stored therein; wherein the at least one instruction, when being loaded and executed by the processor, causes the processor to perform the method for generating the lyrics according to any one of claims 1 to 6, or perform the method for displaying the lyrics according to any one of claims 7 to 9.

14. A computer-readable storage medium, storing at least one instruction; wherein the at least one instruction, when being loaded and executed by a processor, causes the processor to perform the method for generating the lyrics according to any one of claims 1 to 6, or perform the method for displaying the lyrics according to any one of claims 7 to 9.