CLAIMS

What is claimed is:

1. A virtual world sound-prompting method performed by a terminal, the virtual world sound-prompting method comprising:

displaying a visual screen of a first virtual character, the visual screen displaying compass information comprising an azimuth scale corresponding to a facing direction of the first virtual character; and

displaying a first sound indicator in the compass information based on a first sound source located in the virtual world, the first sound indicator indicating a horizontal azimuth and a vertical azimuth corresponding to the first sound source;

wherein the first sound indicator is displayed at a position aligned with a first azimuth scale inside the compass information, the first azimuth scale indicating the horizontal azimuth of the first sound source, and the first sound indicator having a first visual aspect indicating the vertical azimuth of the first sound source, and

wherein the first visual aspect comprises at least one of:

a shape of the first sound indicator;

a vertical azimuth scale associated with the first sound indicator;

an arrow associated with the first sound indicator; or

a text prompt associated with the first sound indicator.

2. The virtual world sound-prompting method according to claim 1, wherein the first visual aspect further comprises at least one of:

an upward-tapered shape indicating that the first sound source is above the first virtual character, or

a downward-tapered shape indicating that the first sound source is below the first virtual character.

3. The virtual world sound-prompting method according to claim 1, wherein the first visual aspect further comprises at least one of:

the vertical azimuth scale indicating a pitch angle of the first sound source with respect to the first virtual character,

the arrow with a pointing direction indicating the vertical azimuth of the first sound source, or

the text prompt indicating the vertical azimuth of the first sound source.

4. The virtual world sound-prompting method according to claim 1, wherein the first sound indicator has a second visual aspect indicating at least one of a sound type or a sound volume associated with the first sound source.

5. The virtual world sound-prompting method according to claim 4, wherein the sound volume corresponds to a sound caused by the first sound source after traveling through a sound distance between the first sound source and the first virtual character.

6. The virtual world sound-prompting method according to claim 5 further comprising:

determining the sound volume based on the sound distance.

7. The virtual world sound-prompting method according to claim 6 further comprising:

determining the sound volume based on an attribute of a space associated with the sound distance.

8. The virtual world sound-prompting method according to claim 5, wherein the first sound indicator is displayed when the sound arrives at the first virtual character.

9. The virtual world sound-prompting method according to claim 4, wherein the second visual aspect comprises at least one of a color or an icon indicating the sound type of the first sound source.

10. The virtual world sound-prompting method according to claim 4, wherein the second visual aspect comprises an acoustic amplitude spectrum, and wherein an amplitude of the acoustic amplitude spectrum indicates the sound volume of a sound caused by the first sound

source in time domain.

11. The virtual world sound-prompting method according to claim 9, wherein a sound caused by the first sound source is caused by a sequence of actions of the first sound source, and wherein the acoustic amplitude spectrum reflects the sequence of actions in time domain.

12. The virtual world sound-prompting method according to claim 1, wherein the compass information comprises a range of azimuth scales centered on the azimuth scale corresponding to the facing direction of the first virtual character, and wherein the first sound indicator is displayed at one end of the range of azimuth scales when the horizontal azimuth of the first sound source is outside the range of azimuth scales.

13. The virtual world sound-prompting method according to claim 1, wherein the method further comprises:

determining a sound volume based on an listening attribute of the first virtual character.

14. An apparatus for virtual world sound-prompting, the apparatus comprising:

at least one memory configured to store program code; and

at least one processor configured to read the program code and operate as instructed by the program code, the program code including:

first displaying code configured to cause the at least one processor to display a visual screen of a first virtual character, the visual screen displaying compass information comprising an azimuth scale corresponding to a facing direction of the first virtual character; and

second displaying code configured to cause the at least one processor to display a first sound indicator in the compass information based on a first sound source located in the virtual world, the first sound indicator indicating a horizontal azimuth and a vertical azimuth corresponding to the first sound source,

wherein the first sound indicator is displayed at a position aligned with a first azimuth scale inside the compass information, the first azimuth scale indicating the horizontal azimuth of the first sound source, and the first sound indicator having a first visual aspect indicating

the vertical azimuth of the first sound source, and

wherein the first visual aspect comprises at least one of:

a shape of the first sound indicator;

a vertical azimuth scale associated with the first sound indicator;

an arrow associated with the first sound indicator; or

a text prompt associated with the first sound indicator.

15. The apparatus of claim 14, wherein the first visual aspect further comprises at least one of:

an upward-tapered shape indicating that the first sound source is above the first virtual character, or

a downward-tapered shape indicating that the first sound source is below the first virtual character.

16. A non-transitory computer-readable medium storing instructions, the instructions comprising: one or more instructions that, when executed by one or more processors of a device for virtual world sound-prompting, cause the one or more processors to:

display a visual screen of a first virtual character, the visual screen displaying compass information comprising an azimuth scale corresponding to a facing direction of the first virtual character; and

display a first sound indicator in the compass information based on a first sound source located in the virtual world, the first sound indicator indicating a horizontal azimuth and a vertical azimuth corresponding to the first sound source,

wherein the first sound indicator is displayed at a position aligned with a first azimuth scale inside the compass information, the first azimuth scale indicating the horizontal azimuth of the first sound source, and the first sound indicator having a first visual aspect indicating the vertical azimuth of the first sound source, and

wherein the first visual aspect comprises at least one of:

a shape of the first sound indicator;

a vertical azimuth scale associated with the first sound indicator;

an arrow associated with the first sound indicator; or

a text prompt associated with the first sound indicator.