CLAIMS

~~What is claimed is:~~

1. A virtual object control method, applicable to a terminal, the method comprising:

obtaining a skill type of a skill in response to a first click/tap operation on a skill control;

displaying, in response to the skill type of the skill being a target skill, a castable region of the skill in a virtual scene according to a position where a controlled virtual object is located and a casting range of the skill, the target skill being a skill that supports selecting a casting position based on a screen click/tap; ~~and~~

controlling, in response to a second click/tap operation in the castable region, the controlled virtual object to cast the skill at a casting position indicated by the second click/tap operation; and~~.~~

controlling, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation, the framing operation being used for defining a closed pattern in the castable region based on a drag trajectory, the casting region being the closed pattern, or the casting region being a smallest enclosing circle of the closed pattern,

wherein the controlling, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation comprises: calculating a region area of the casting region defined by the framing operation in response to the framing operation received in the castable region; and controlling the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold,

wherein the controlling the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold comprises: displaying a second skill circle in the casting region in response to the region area being less than the area threshold, the second skill circle being used for identifying an influence range of a skill effect produced by casting the skill, and a shape of the second skill circle being the same as the casting region; and controlling the controlled virtual object to cast the skill in the second skill circle.

2. The method according to claim 1, wherein the controlling, in response to a second click/tap operation in the castable region, the controlled virtual object to cast the skill at a casting position indicated by the second click/tap operation comprises:

obtaining screen coordinates of the casting position indicated by the second click/tap operation in a screen in response to the second click/tap operation in the castable region;

mapping the screen coordinates into scene coordinates of the casting position in the virtual scene; and

controlling the controlled virtual object to cast the skill at the scene coordinates.

3. The method according to claim 1 or 2, wherein before the controlling, in response to a second click/tap operation in the castable region, the controlled virtual object to cast the skill at a casting position indicated by the second click/tap operation, the method further comprises:

determining, in response to a third click/tap operation on a map control, a target region clicked/tapped in the map control;

displaying a target scene corresponding to the target region in the virtual scene, the target scene comprising the castable region; and

detecting the second click/tap operation in the castable region in the target scene.

4. The method according to claim 1 or 2, wherein in a case that the castable region is a round region, the displaying a castable region of the skill in a virtual scene according to a position where a controlled virtual object is located and a casting range of the skill comprises:

in the virtual scene, determining the position where the controlled virtual object is located as a center of the castable region, and determining a farthest casting distance of the skill as a radius of the castable region; and

displaying a casting template of the castable region in the virtual scene, the casting template being used for indicating that casting of the skill in a region outside the casting template is invalid.

5. The method according to claim 1 or 2, wherein after the obtaining a skill type of a skill in response to a first click/tap operation on a skill control, the method further comprises:

displaying at least one of casting countdown or casting prompt information of the skill in the virtual scene in response to the skill being the target skill.

6. The method according to claim 1 or 2, wherein after the displaying a castable region of the skill in a virtual scene according to a position where a controlled virtual object is located and a casting range of the skill in response to the skill type of the skill being a target skill, the method further comprises:

controlling, in response to a skill casting operation received on a wheel virtual joystick corresponding to the skill control, the controlled virtual object to cast the skill at a position

indicated by the skill casting operation.

7. The method according to claim 1 or 2, wherein before the obtaining a skill type of a skill in response to a first click/tap operation on a skill control, the method further comprises:

in a case that the first click/tap operation in the screen is detected, obtaining, in response to presence of a user interface (UI) control at a position indicated by the first click/tap operation, a control type of the UI control;

obtaining trigger states of other skill controls in response to the control type of the UI control being the skill control corresponding to the skill, the other skill controls being skill controls of other skills different from the skill; and

determining that the first click/tap operation on the skill control is detected in response to the other skill controls not in triggered states.

8. The method according to claim 1 or 2, wherein before the controlling, in response to a second click/tap operation in the castable region, the controlled virtual object to cast the skill at the casting position, the method further comprises:

updating, in response to a drag operation in the castable region, a casting position indicated by the drag operation in the virtual scene based on a drag trajectory of the drag operation.

9. The method according to claim 1 or 2, wherein the controlling the controlled virtual object to cast the skill at the casting position comprises:

displaying a first skill circle at the casting position, the first skill circle being used for identifying an influence range of a skill effect produced by casting the skill; and

controlling the controlled virtual object to cast the skill in the first skill circle.

10. The method according to claim 9, wherein the skill is used for producing a skill effect on a single target, and the first skill circle comprises at least two targets; and

the controlling the controlled virtual object to cast the skill in the first skill circle comprises:

determining a first target from the at least two targets in the first skill circle according to a target determining principle; and

controlling the controlled virtual object to cast the skill to produce the skill effect on the first target;

the target determining principle comprising a principle of nearest distance first, a principle of lowest health point first, and a principle of lowest health bar first.

~~11. The method according to claim 1 or 2, further comprising:~~

~~controlling, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation, the framing operation being used for defining a closed pattern in the castable region based on a drag trajectory, the casting region being the closed pattern, or the casting region being a smallest enclosing circle of the closed pattern.~~

~~12. The method according to claim 11, wherein the controlling, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation comprises:~~

~~calculating a region area of the casting region defined by the framing operation in response to the framing operation received in the castable region; and~~

~~controlling the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold.~~

~~13. The method according to claim 12, wherein the controlling the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold comprises:~~

~~displaying a second skill circle in the casting region in response to the region area being less than the area threshold, the second skill circle being used for identifying an influence range of a skill effect produced by casting the skill, and a shape of the second skill circle being the same as the casting region; and~~

~~controlling the controlled virtual object to cast the skill in the second skill circle.~~

~~14~~11. The method according to claim ~~13~~1, wherein the skill is used for producing a skill effect on a single target, and the second skill circle comprises at least two targets; and

the controlling the controlled virtual object to cast the skill in the second skill circle comprises:

determining a second target from the at least two targets in the second skill circle according to a target determining principle; and

controlling the controlled virtual object to cast the skill to produce the skill effect on the second target;

the target determining principle comprising a principle of nearest distance first, a principle of lowest health point first, and a principle of lowest health bar first.

~~15~~12. A virtual object control apparatus, comprising:

a detection module, configured to obtain a skill type of a skill in response to a first click/tap operation on a skill control;

a determining module, configured to display, in response to the skill type of the skill being a target skill, a castable region of the skill in a virtual scene according to a position where a controlled virtual object is located and a casting range of the skill, the target skill being a skill that supports selecting a casting position based on a screen click/tap; and

a control module, configured to control, in response to a second click/tap operation in the castable region, the controlled virtual object to cast the skill at a casting position indicated by the second click/tap operation~~.~~.

wherein the control module is configured to control, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation, the framing operation being used for defining a closed pattern in the castable region based on a drag trajectory, the casting region being the closed pattern, or the casting region being a smallest enclosing circle of the closed pattern,

wherein the control module is configured to calculate a region area of the casting region defined by the framing operation in response to the framing operation received in the castable region; and the control module is configured to control the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold,

wherein the apparatus further comprises: a display module, configured to display a second skill circle in the casting region in response to the region area being less than the area threshold, the second skill circle being used for identifying an influence range of a skill effect produced by casting the skill, and a shape of the second skill circle being the same as the casting region; the control module being configured to control the controlled virtual object to cast the skill in the second skill circle.

~~16~~13. The apparatus according to claim ~~15~~12, wherein the control module is configured to:

obtain screen coordinates of the casting position indicated by the second click/tap operation in a screen in response to the second click/tap operation in the castable region;

map the screen coordinates into scene coordinates of the casting position in the virtual scene; and

control the controlled virtual object to cast the skill at the scene coordinates.

~~17~~14. The apparatus according to claim ~~15~~ 12 or ~~16~~13, further comprising:

a mapping detection module, configured to: determine, in response to a third click/tap operation on a map control, a target region clicked/tapped in the map control; display a target scene corresponding to the target region in the virtual scene, the target scene comprising the castable region; and detect the second click/tap operation in the castable region in the target scene.

~~18~~15. The apparatus according to claim ~~15~~ 12 or ~~16~~13, wherein in a case that the castable region is a round region, the determining module is configured to:

in the virtual scene, determine the position where the controlled virtual object is located as a center of the castable region, and determine a farthest casting distance of the skill as a radius of the castable region; and

display a casting template of the castable region in the virtual scene, the casting template being used for indicating that casting of the skill in a region outside the casting template is invalid.

~~19~~16. The apparatus according to claim ~~15~~ 12 or ~~16~~13, further comprising:

a display module, configured to display at least one of casting countdown or casting prompt information of the skill in the virtual scene in response to the skill being the target skill.

~~20~~17. The apparatus according to claim ~~15~~ 12 or ~~16~~13, wherein the control module is configured to control, in response to a skill casting operation received on a wheel virtual joystick corresponding to the skill control, the controlled virtual object to cast the skill at a position indicated by the skill casting operation.

~~21~~18. The apparatus according to claim ~~15~~ 12 or ~~16~~13, wherein the detection module is further configured to:

in a case that a third click/tap operation in the screen is detected, obtain, in response to presence of a user interface (UI) control at a position indicated by the third click/tap operation, a control type of the UI control;

obtain trigger states of other skill controls in response to the control type of the UI control being the skill control corresponding to the skill, the other skill controls being skill controls of other skills different from the skill; and

determine that the first click/tap operation on the skill control is detected in response to the other skill controls not in triggered states.

~~22~~19. The apparatus according to claim ~~15~~ 12 or ~~16~~13, further comprising:

an update module, configured to update, in response to a drag operation of a casting position in the castable region, the casting position in the virtual scene based on a drag trajectory of the drag

operation.

~~23~~20. The apparatus according to claim ~~15~~ 12 or ~~16~~13, further comprising:

a display module, configured to display a first skill circle at the casting position, the first skill circle being used for identifying an influence range of a skill effect produced by casting the skill;

the control module being configured to control the controlled virtual object to cast the skill in the first skill circle.

~~24~~21. The apparatus according to claim ~~23~~20, wherein the skill is used for producing a skill effect on a single target, and the first skill circle comprises at least two targets; and

the control module is configured to determine a first target from the at least two targets in the first skill circle according to a target determining principle; and

the control module is configured to control the controlled virtual object to cast the skill to produce the skill effect on the first target;

the target determining principle comprising a principle of nearest distance first, a principle of lowest health point first, and a principle of lowest health bar first.

~~25. The apparatus according to claim 15 or 16, wherein the control module is configured to control, in response to a framing operation received in the castable region, the controlled virtual object to cast the skill in a casting region defined by the framing operation, the framing operation being used for defining a closed pattern in the castable region based on a drag trajectory, the casting region being the closed pattern, or the casting region being a smallest enclosing circle of the closed pattern.~~

~~26. The apparatus according to claim 25, wherein the control module is configured to calculate a region area of the casting region defined by the framing operation in response to the framing operation received in the castable region; and~~

~~the control module is configured to control the controlled virtual object to cast the skill in the casting region defined by the framing operation in response to the region area being less than an area threshold.~~

~~27. The apparatus according to claim 26, further comprising:~~

~~a display module, configured to display a second skill circle in the casting region in response to the region area being less than the area threshold, the second skill circle being used for identifying an influence range of a skill effect produced by casting the skill, and a shape of the second skill circle being the same as the casting region;~~

~~the control module being configured to control the controlled virtual object to cast the skill in the second skill circle.~~

~~28~~22. The apparatus according to claim ~~27~~12, wherein the skill is used for producing a skill effect on a single target, and the second skill circle comprises at least two targets; and

the control module is configured to determine a second target from the at least two targets in the second skill circle according to a target determining principle; and

the control module is configured to control the controlled virtual object to cast the skill to produce the skill effect on the second target;

the target determining principle comprising a principle of nearest distance first, a principle of lowest health point first, and a principle of lowest health bar first.

~~29~~23. A terminal, comprising one or more processors and one or more memories, the one or more memories storing at least one program code, the at least one program code being loaded and executed by the one or more processors to implement the operations performed in the virtual object control method according to any one of claims 1 to ~~14~~11.

~~30~~24. A computer-readable storage medium, storing at least one program code, the at least one program code being loaded and executed by a processor to implement the operations performed in the virtual object control method according to any one of claims 1 to ~~14~~11.