[CLAIMS]

[Claim 1]

A method for providing a dart game image performed by a dart game device participating in a play session assigning a play time constraint to two or more devices, the method comprising:

determining a valid play time period of the play session based on the play time constraint assigned to the play session, wherein the valid play time period of a first device at least partially corresponds to a valid play time period of a second device participating in the play session; and

displaying information related to the valid play time period.

[Claim 2]

The method for providing a dart game image of claim 1, wherein the information related to the valid play time includes at least one of information indicating the remaining valid play time period, information indicating the elapse of the valid play time period, information indicating the time elapse of the play session, or information indicating the time constraint assigned to the play session.

[Claim 3]

The method for providing a dart game image of claim 1, wherein the determining of the valid play time period of the play session includes

determining the valid play time period based on the elapsed time in the play session and the time constraint assigned to the play session.

[Claim 4]

The method for providing a dart game image of claim 1, wherein the determining of the valid play time period of the play session includes

determining the valid play time period of the play session in a mode in which

as time elapses in the play session, the valid play time period is reduced.

[Claim 5]

The method for providing a dart game image of claim 1, wherein the play time constraint and the valid play time period are determined again at a time when the play session is changed, and

the play session includes at least one of a first sub play session including a time constraint for dart pin throwing, a second sub play session including a time constraint for a round which permits dart pin throwing of N times, or a third sub play session including a time constraint for a set including K rounds, and

the N and the K are natural numbers.

[Claim 6]

The method for providing a dart game image of claim 1, wherein the determined valid play time period is initialized when it is detected that a predetermined number of dart pins are hit in the dart game device.

[Claim 7]

The method for providing a dart game image of claim 1, wherein the displaying of the information related to the valid play time period includes

determining a display attribute for the information related to the valid play time period, and

displaying the information related to the valid play time period based on the determined display attribute, and

the display attribute includes at least one of a size attribute for a size of the information related to the valid play time period, a color attribute for a color of the information related to the valid play time period, or a shade attribute for a shade of the information related to the valid play time period.

[Claim 8]

The method for providing a dart game image of claim 7, wherein the determining of the display attribute for the information related to the valid play time period includes

determining the display attribute for the information related to the valid play time period based on at least one of the play time constraint or the valid play time period.

[Claim 9]

The method for providing a dart game image of claim 1, wherein the displaying of the information related to the valid play time period includes,

determining a highlight effect for the information related to the valid play time period based on at least one of the play time constraint or the valid play time period, and

applying the determined highlight effect to the information related to the valid play time period,

wherein the highlight effect is an effect in which a prestored image is displayed in a region adjacent at least a part of a region in which the information related to the valid play time period is displayed.

[Claim 10]

The method for providing a dart game image of claim 9, wherein an intensity of the highlight effect is higher as the valid play time period is shorter, and

the higher-intensity highlight effect includes at least one of a highlight effect in which a size of the prestored image is relatively large, a highlight effect in which the prestored image has a relatively high chroma, or a highlight effect in which a flashing speed of the prestored image is relatively high.

[Claim 11]

The method for providing a dart game image of claim 1, further comprising:

transmitting, when the valid play time period of the play session is determined, the information related to the valid play time period to another device related to the dart game device to cause the information related to the valid play time to be output to the another device.

[Claim 12]

The method for providing a dart game image of claim 1, wherein the displaying of the information related to the valid play time period includes

displaying the information related to the valid play time period in a display region adjacent to outlines of one or more segment regions in a dart target unit, in which a probability that a dart pin to be thrown by a player of the dart game device will be hit is higher than a predetermined threshold.

[Claim 13]

A dart game device participating in a play session assigning a play time constraint to two or more devices, comprising:

a control unit determining a valid play time period of the play session based on the play time constraint assigned to the play session, wherein the valid play time period of a first device at least partially corresponds to a valid play time period of a second device participating in the play session; and

a display unit displaying information related to the valid play time period.

[Claim 14]

A computer program stored in a computer-readable storage medium, wherein when the computer program is executed by one or more processors, the program performs a method for providing a dart game image, the method comprising:

determining, based on the play time constraint assigned to a play session assigning a play time constraint to two or more devices, a valid play time period of the

play session, wherein the valid play time period of a first device at least partially corresponds to a valid play time period of a second device participating in the play session; and

displaying information related to the valid play time period.

[Claim 15]

A method for providing a dart game image performed by a dart game server, the method comprising:

determining, based on the play time constraint assigned to a play session assigning a play time constraint to two or more devices, a valid play time period of a first device participating in the play session, wherein the valid play time period of the first device at least partially corresponds to a valid play time period of a second device participating in the play session; and

transmitting information related to the valid play time period to the first device.

[Claim 16]

A dart game server comprising:

a server control unit determining, based on the play time constraint assigned to a play session assigning a play time constraint to two or more devices, a valid play time period of a first device participating in the play session, wherein the valid play time period of the first device at least partially corresponds to a valid play time period of a second device participating in the play session; and

a server network communication unit transmitting information related to the valid play time period to the first device.