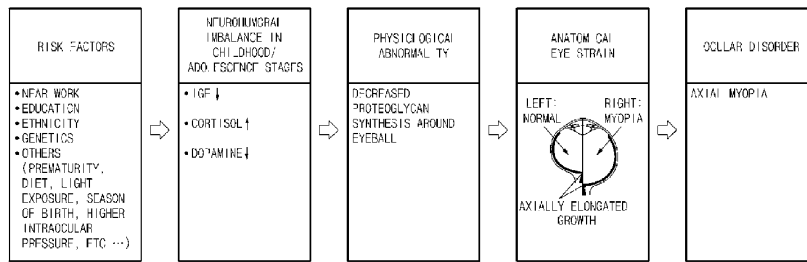
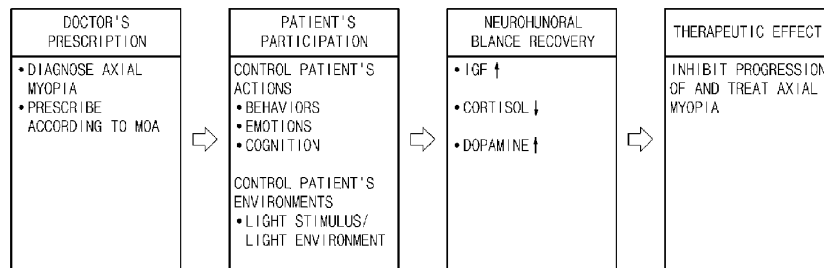


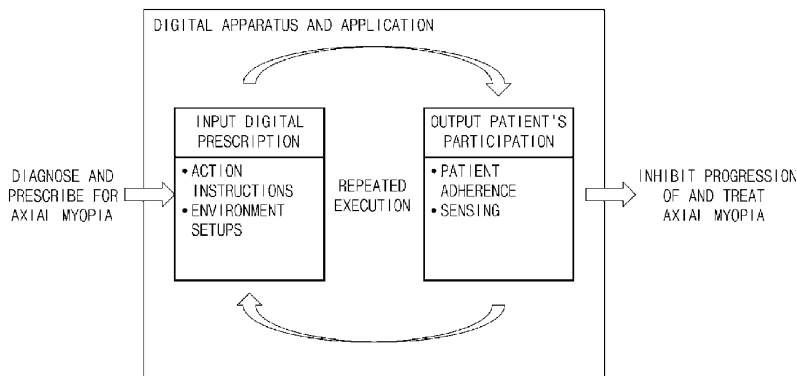
[Fig. 1a]



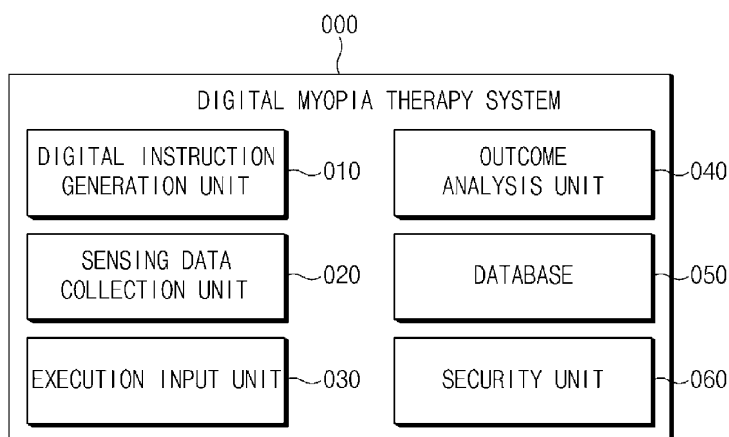
[Fig. 1b]



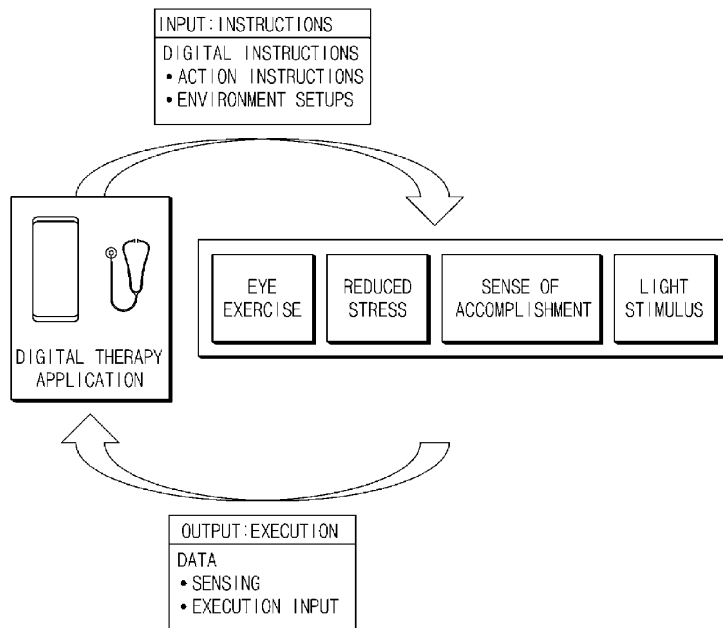
[Fig. 1c]



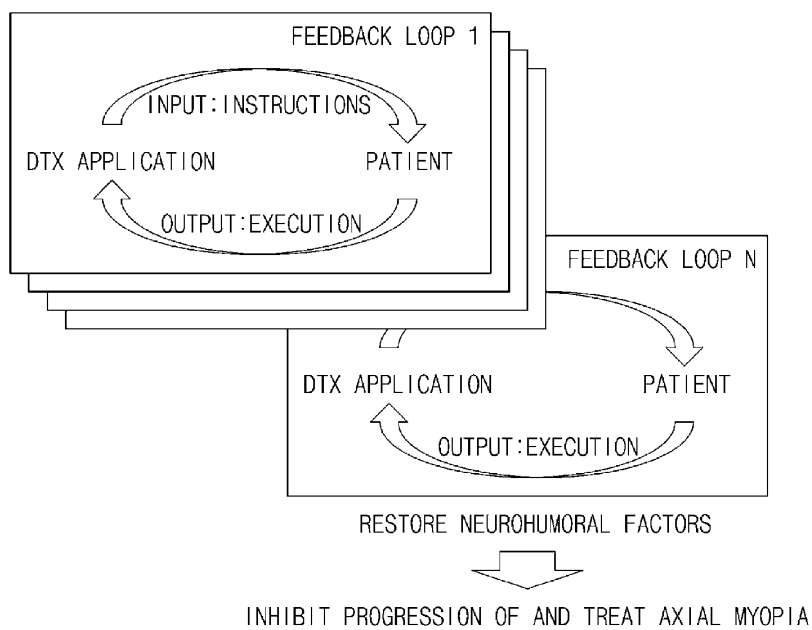
[Fig. 2]



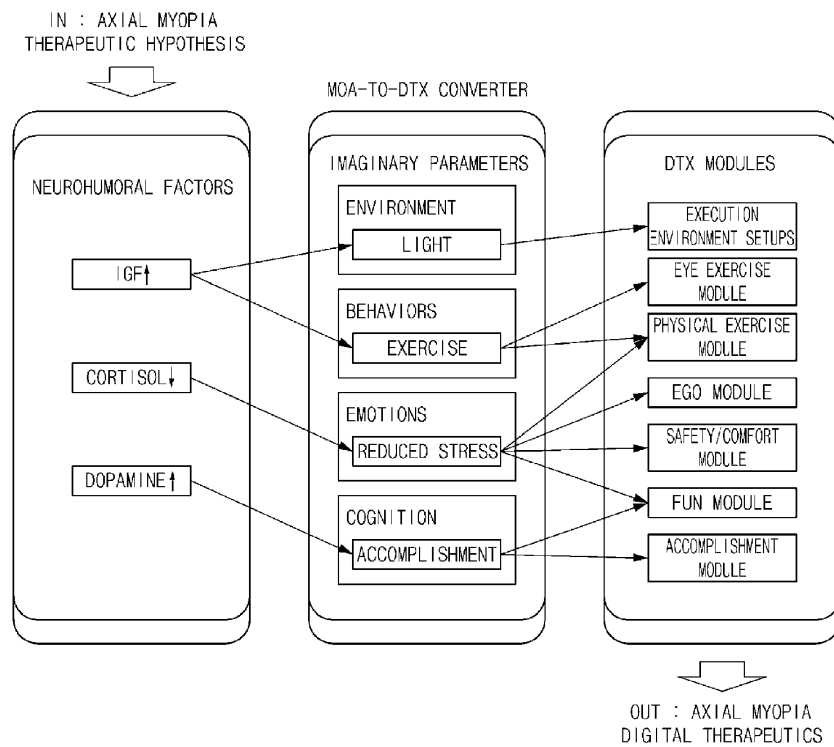
[Fig. 3]



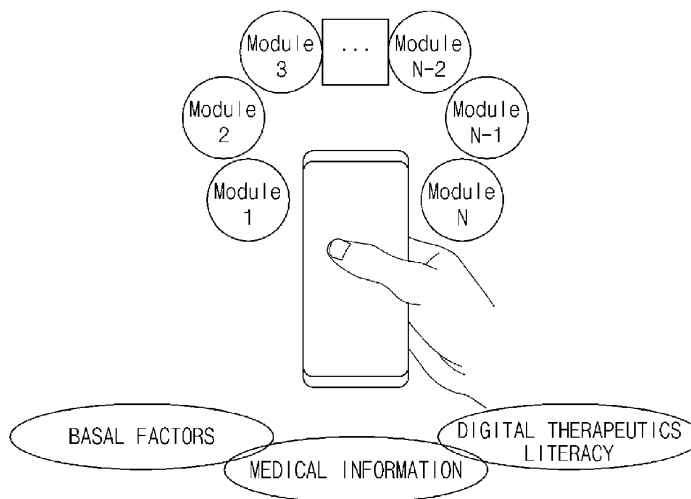
[Fig. 4]



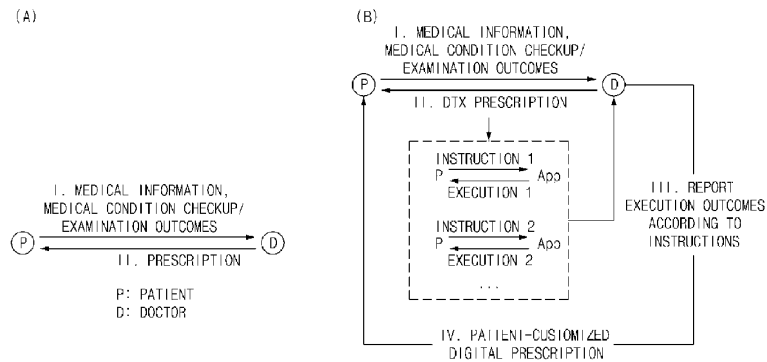
[Fig. 5a]



[Fig. 5b]



[Fig. 6]



[Fig. 7a]

ENVIRONMENT SETUPS	
INSTRUCTIONS	EXECUTION
• ILLUMINANCE MEASUREMENT/CONTROL • LIGHT ENVIRONMENT ALERT • ...	• USING LUX METER APP • PATIENT'S PARTICIPATION • ...

[Fig. 7b]

EYE EXERCISE MODULE	
INSTRUCTIONS	EXECUTION
• EYEBALL EXERCISE • EYE BLINKING • STARING INTO DISTANCE • EYE CLOSING • ...	• PATIENT'S ADHERENCE MONITORING USING GAZE TRACKING TECHNOLOGY • PATIENT'S PARTICIPATION • ...

[Fig. 7c]

PHYSICAL EXERCISE MODULE	
INSTRUCTIONS	EXECUTION
• RELAXATION EXERCISE • DEEP BREATHING • MEDITATION • ...	• PATIENT'S PARTICIPATION • ...

[Fig. 7d]

EGO MODULE	
INSTRUCTIONS	EXECUTION
• CONVERSATION • DRAWING • MEDITATION • DIARY WRITING • MAKING HIS/HER OWN SAFE SPACE • HIS/HER FAVORITES • HIS/HER OWN BUCKET LIST • TRAVEL PLANS • ...	• PATIENT'S PARTICIPATION • AI • ...

[Fig. 7e]

SAFETY/COMFORT MODULE	
INSTRUCTIONS	EXECUTION
• CHATTING • EXPRESSION (WRITING, SINGING, DRAWING) • LEAVING UNPLEASANT EMOTIONS • ...	• PATIENT'S PARTICIPATION • GUARDIAN'S GUIDANCE • ...

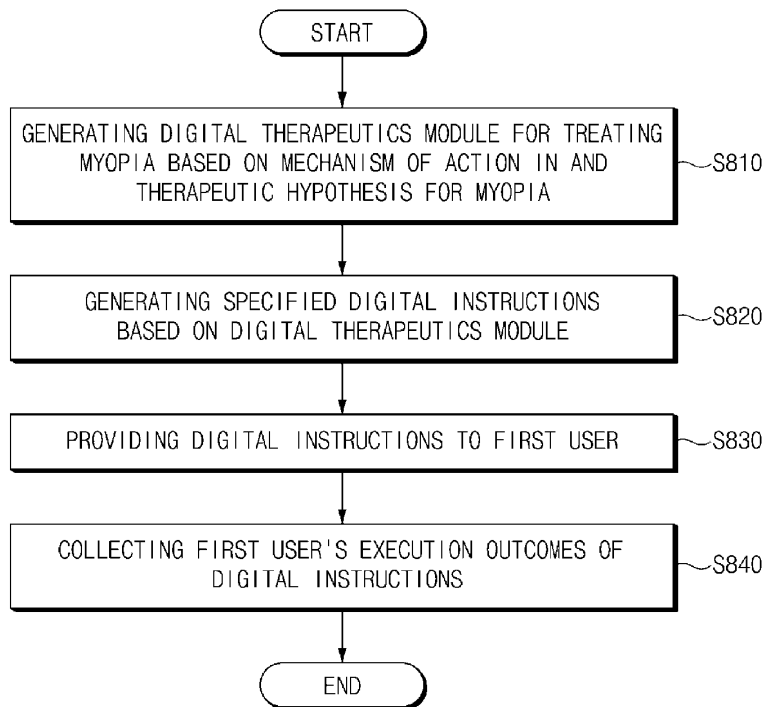
[Fig. 7f]

FUN MODULE	
INSTRUCTIONS	EXECUTION
• GAME • MUSIC • VIDEO • ...	• PATIENT'S PARTICIPATION • MUTUAL COMMUNICATION BETWEEN PATIENT AND APPLICATION • LEVEL-UP • ...

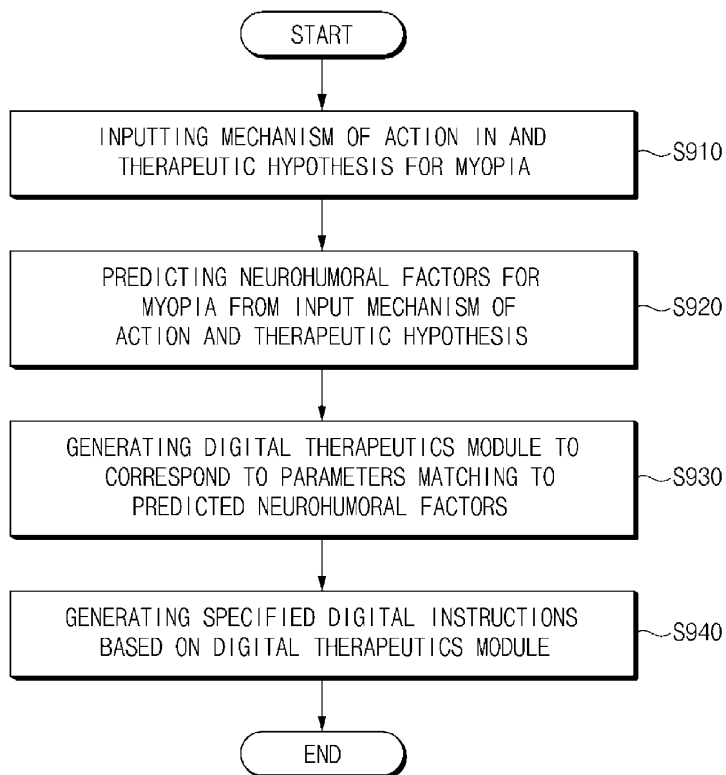
[Fig. 7g]

ACCOMPLISHMENT MODULE	
INSTRUCTIONS	EXECUTION
• TASK • GUARDIAN COMPLIMENT • DTX LITERACY • ...	• PATIENT'S PARTICIPATION • COMPENSATION THROUGH PATIENT-GUARDIAN AND PATIENT-DOCTOR RELATIONSHIP • ...

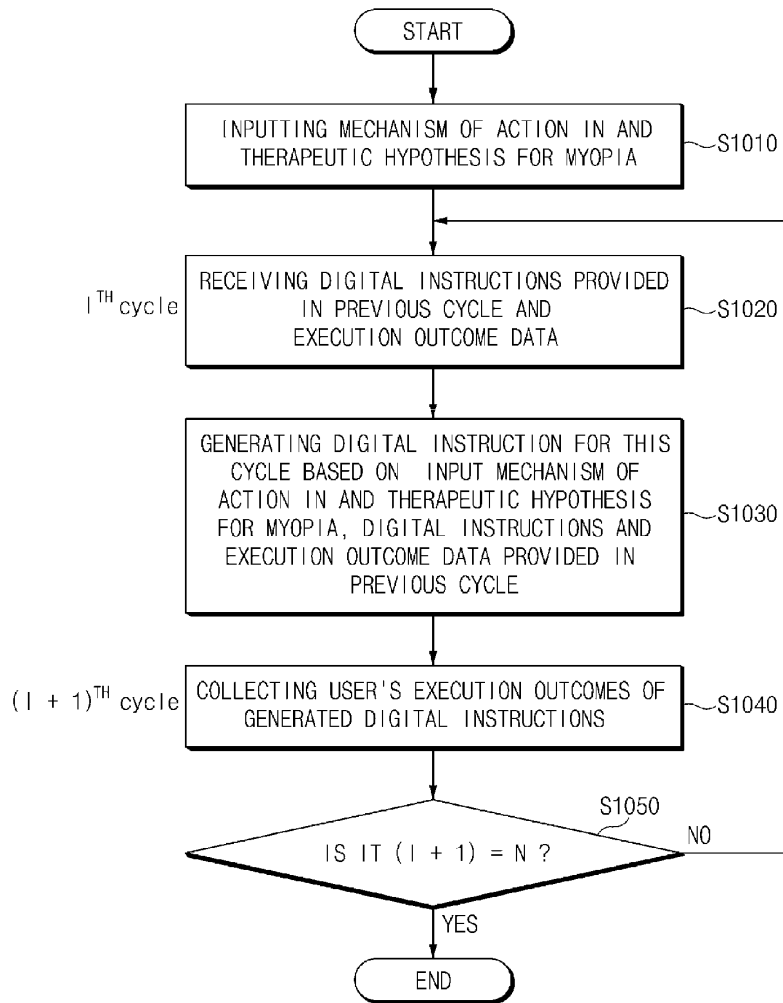
[Fig. 8]



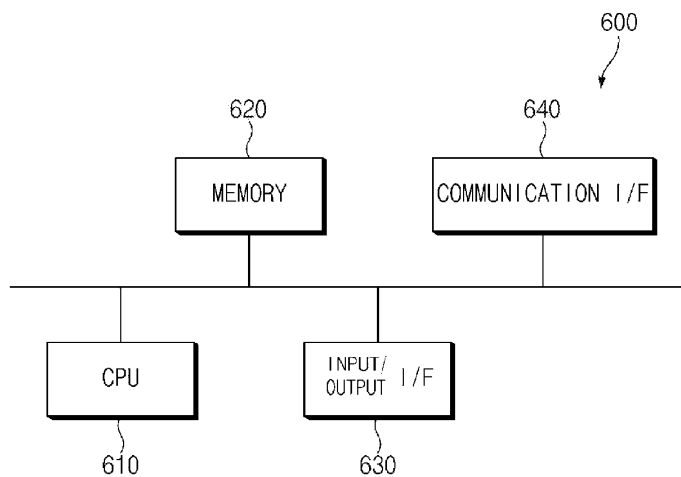
[Fig. 9]



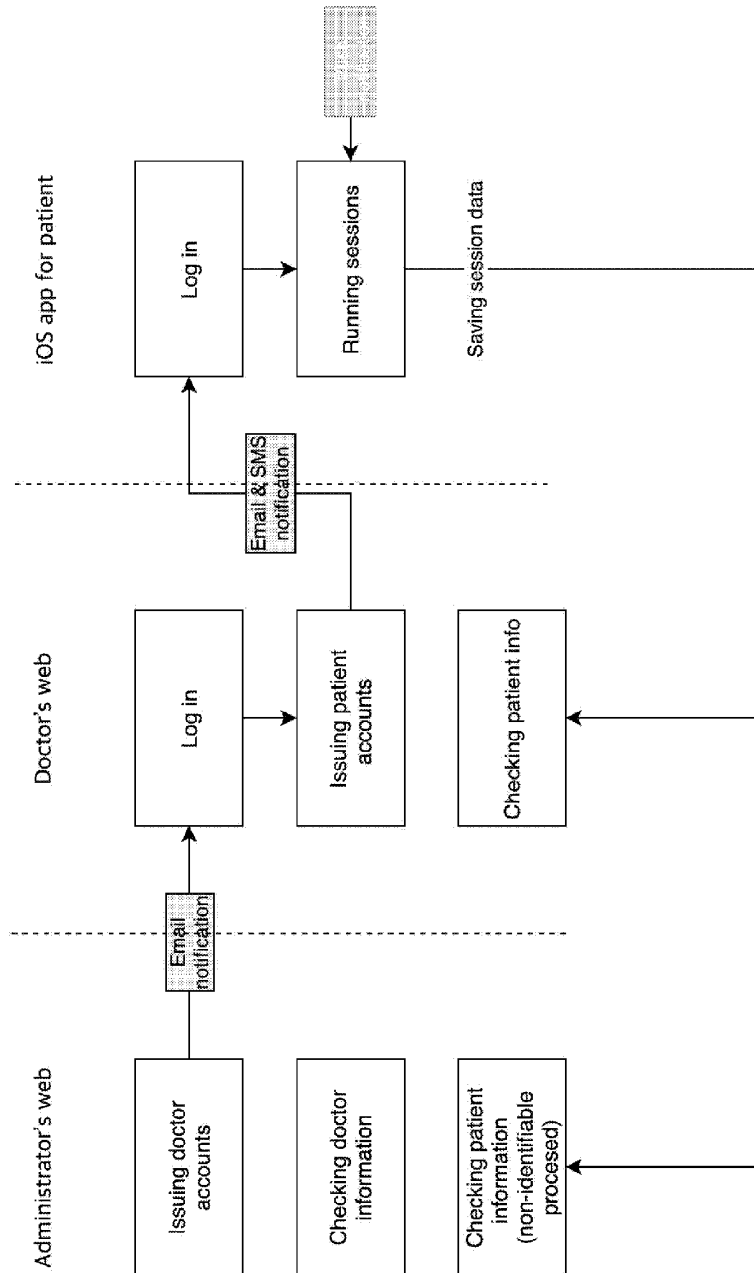
[Fig. 10]



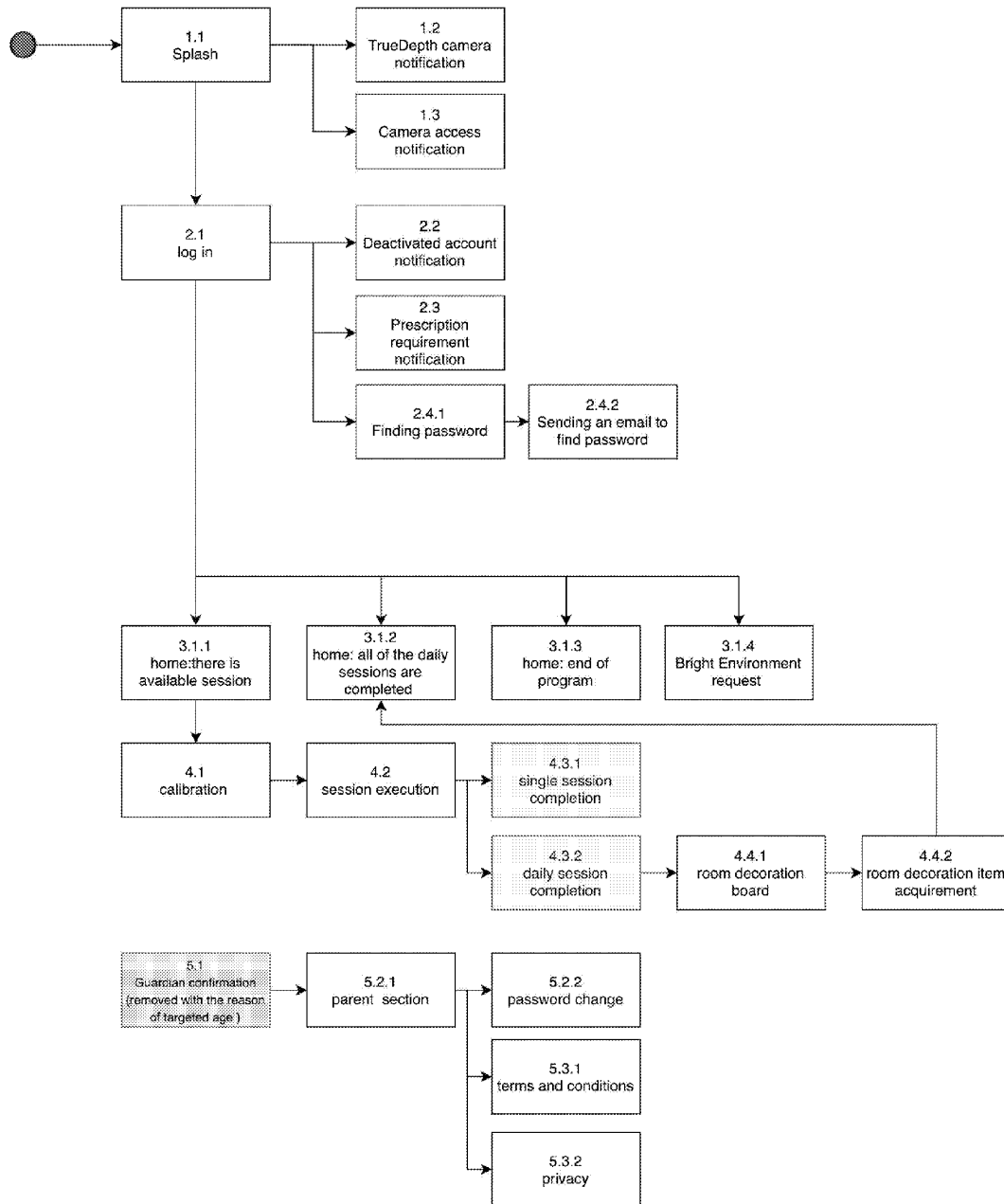
[Fig. 11]



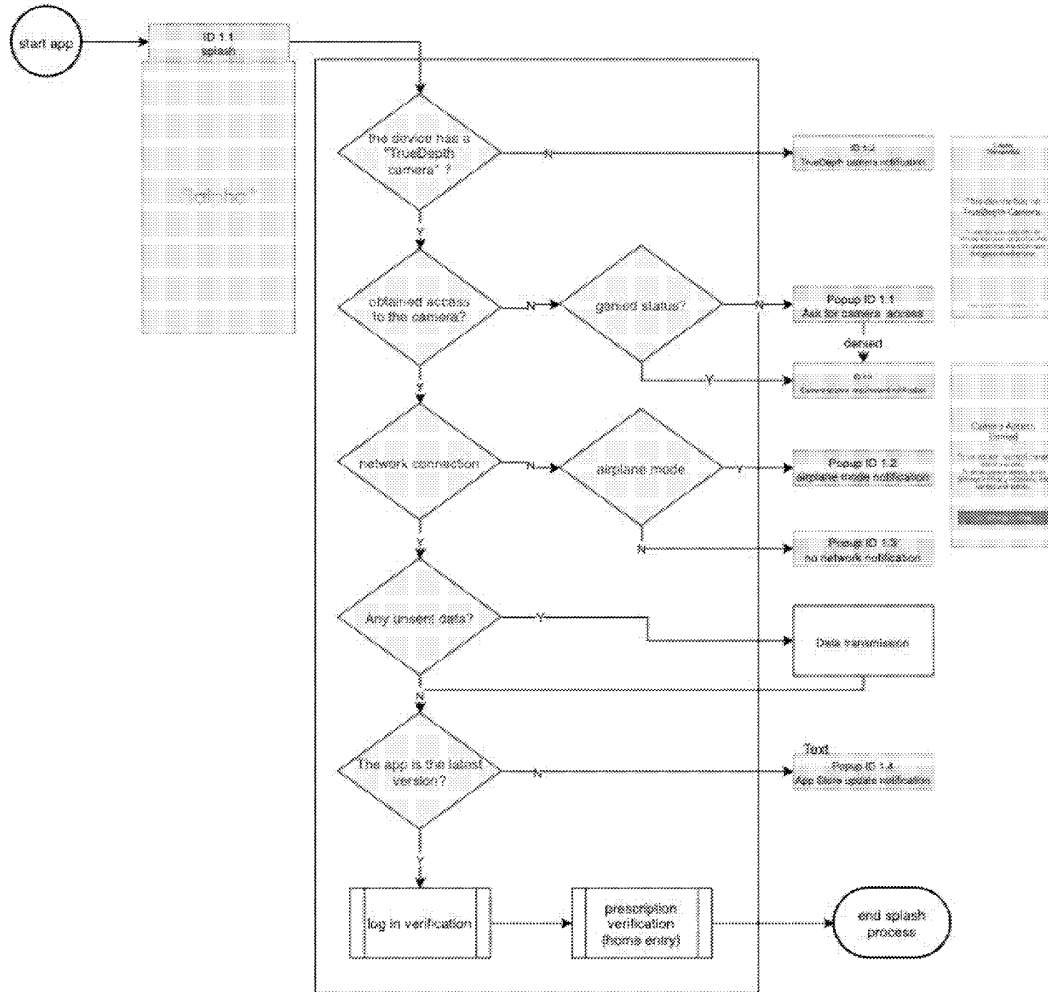
[Fig. 12]



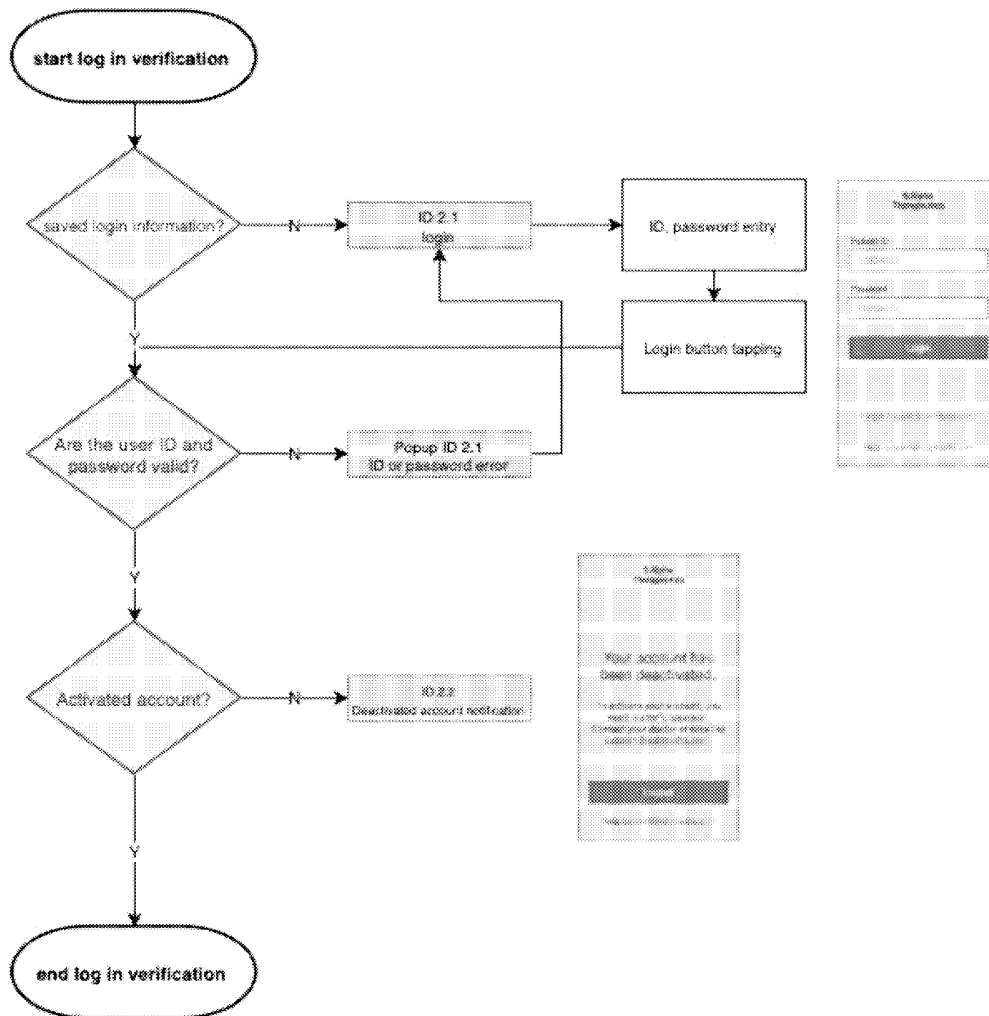
[Fig. 13]



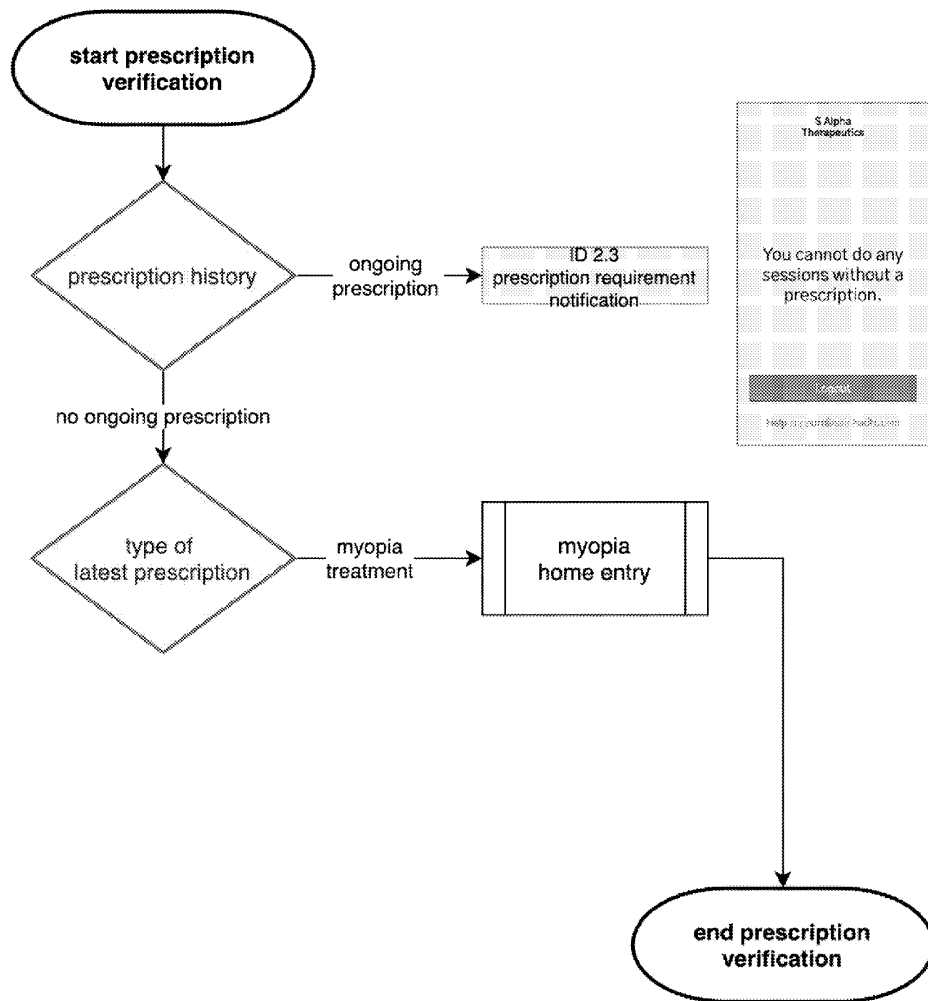
[Fig. 14]



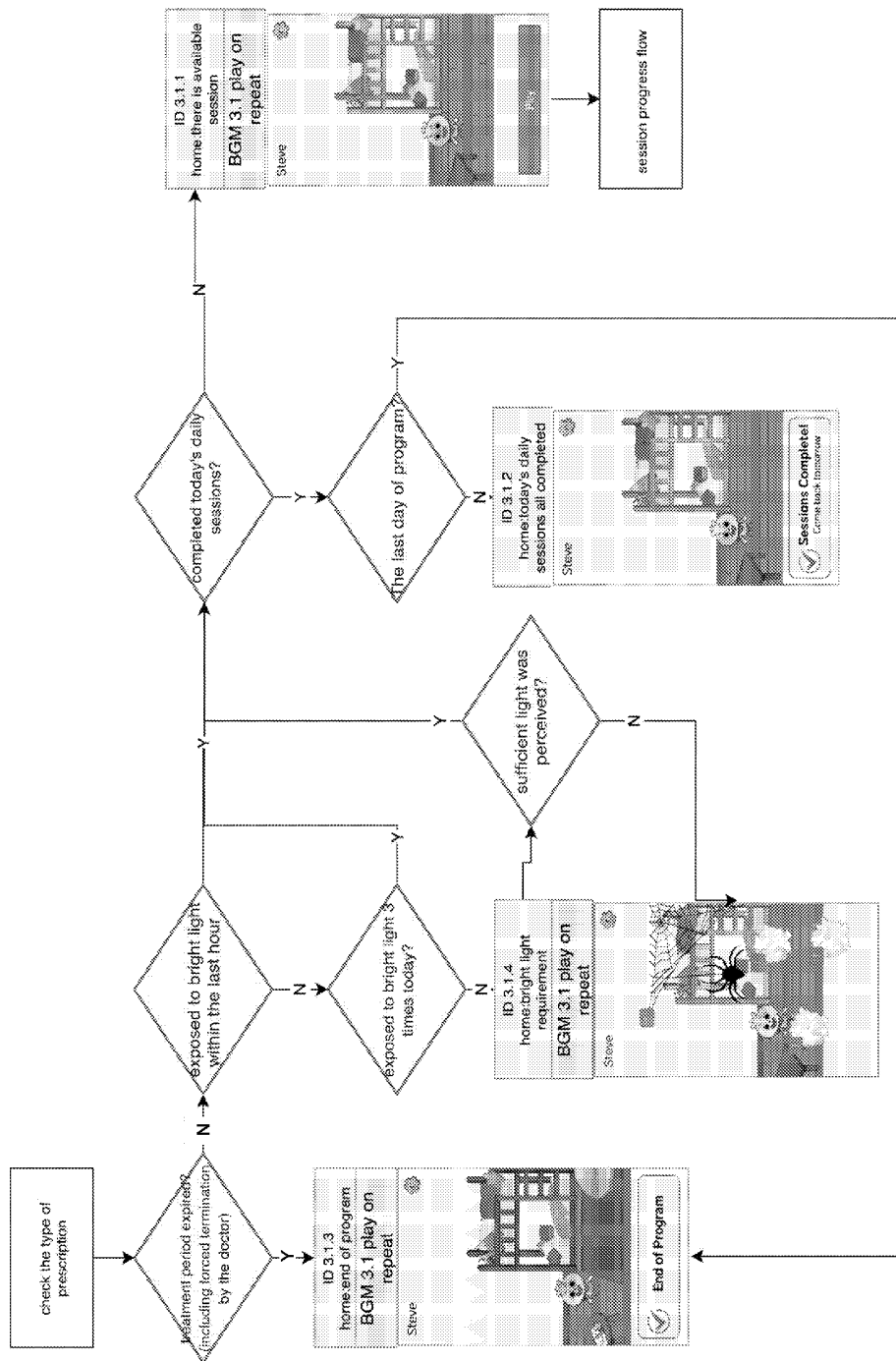
[Fig. 15]



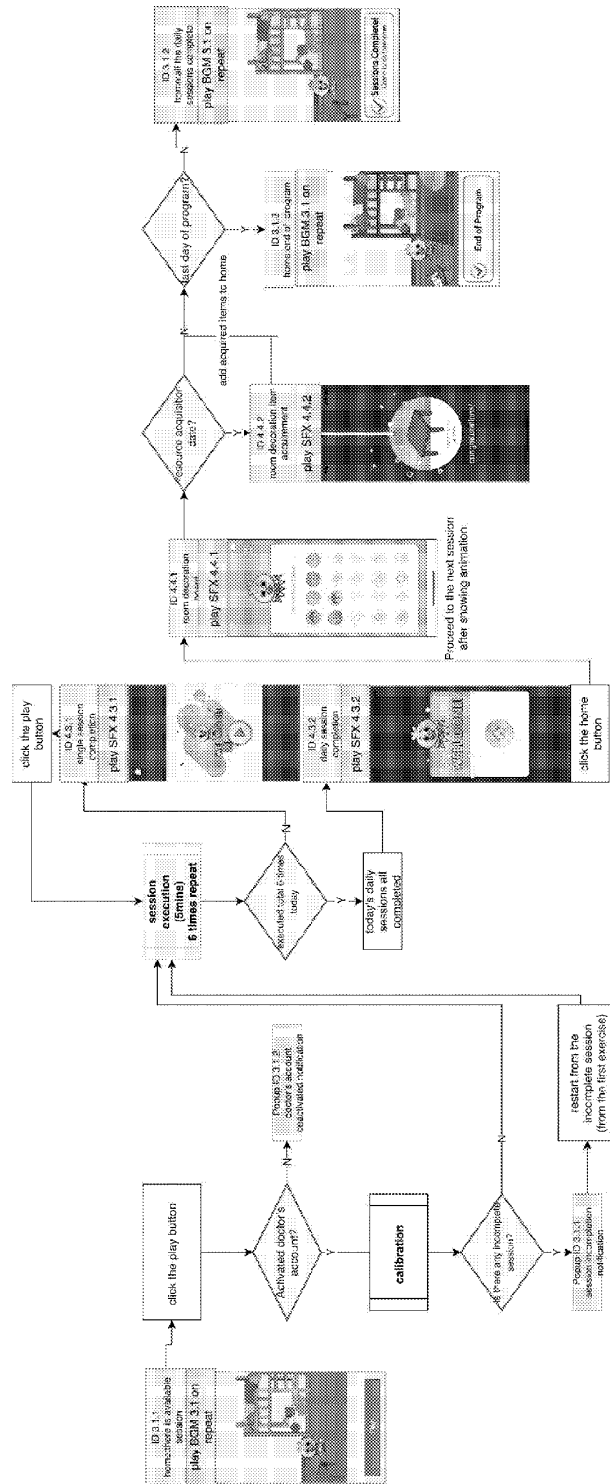
[Fig. 16]



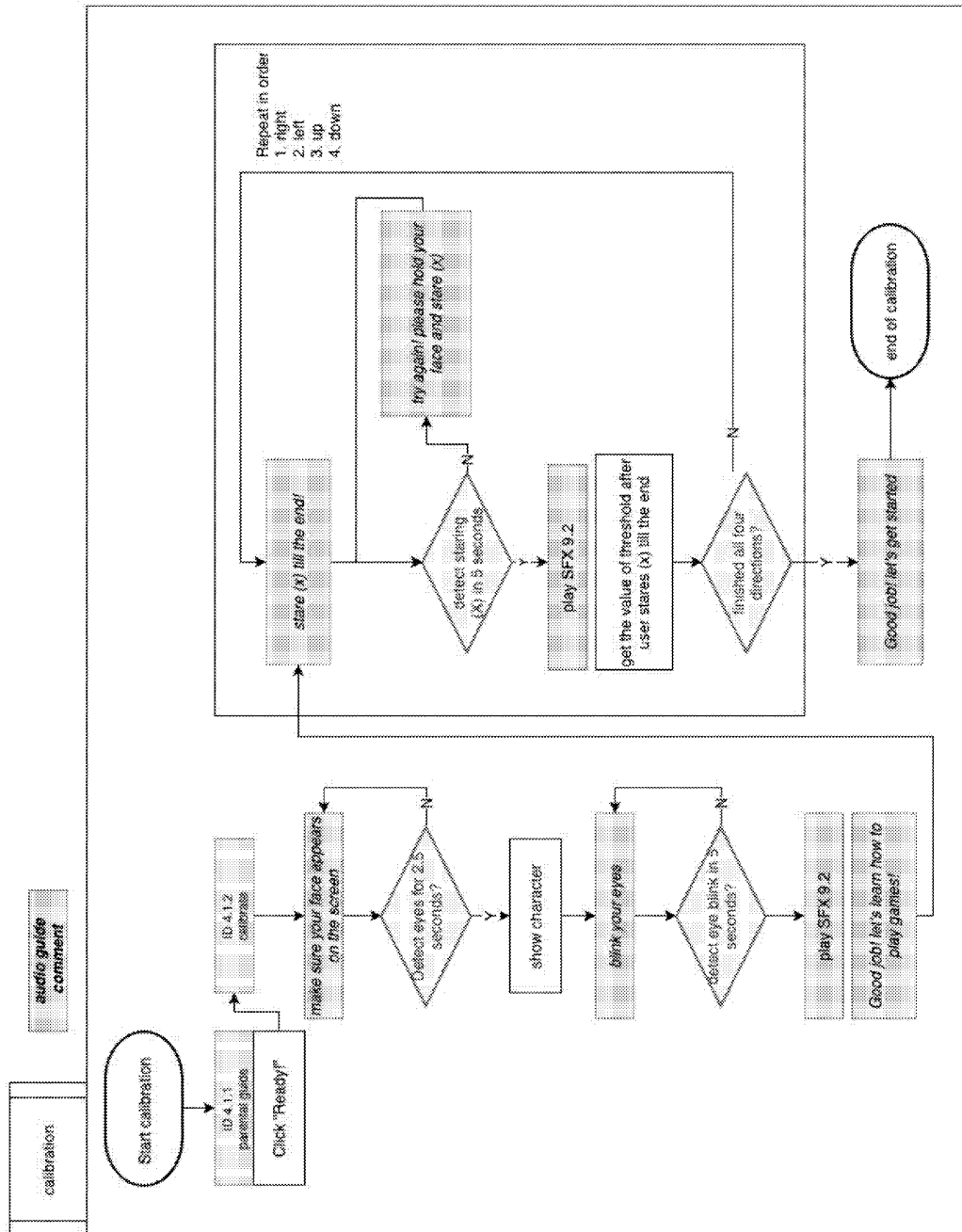
[Fig. 17]



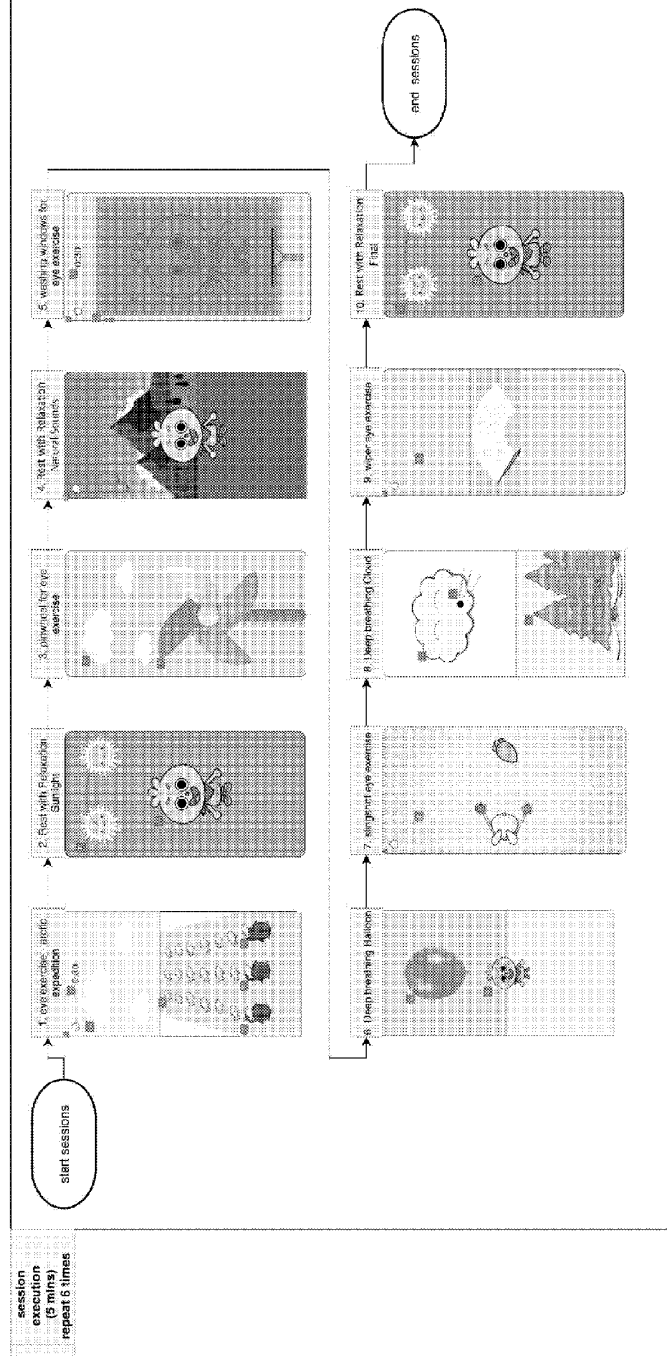
[Fig. 18]



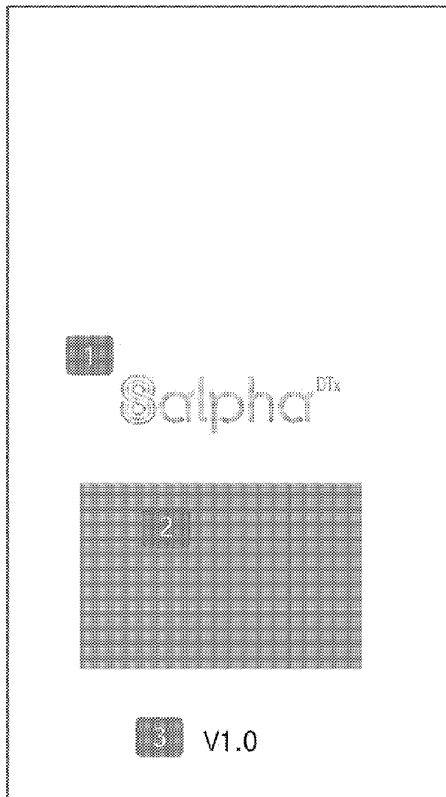
[Fig. 19]



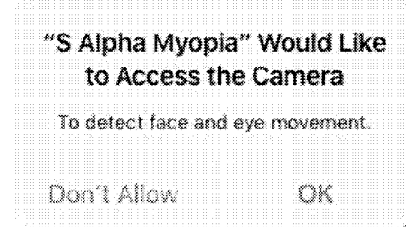
[Fig. 20]



[Fig. 21]

1.1 Splash

ID	1.1 iOS Camera Access Pop-up (iOS pop-up)
----	---

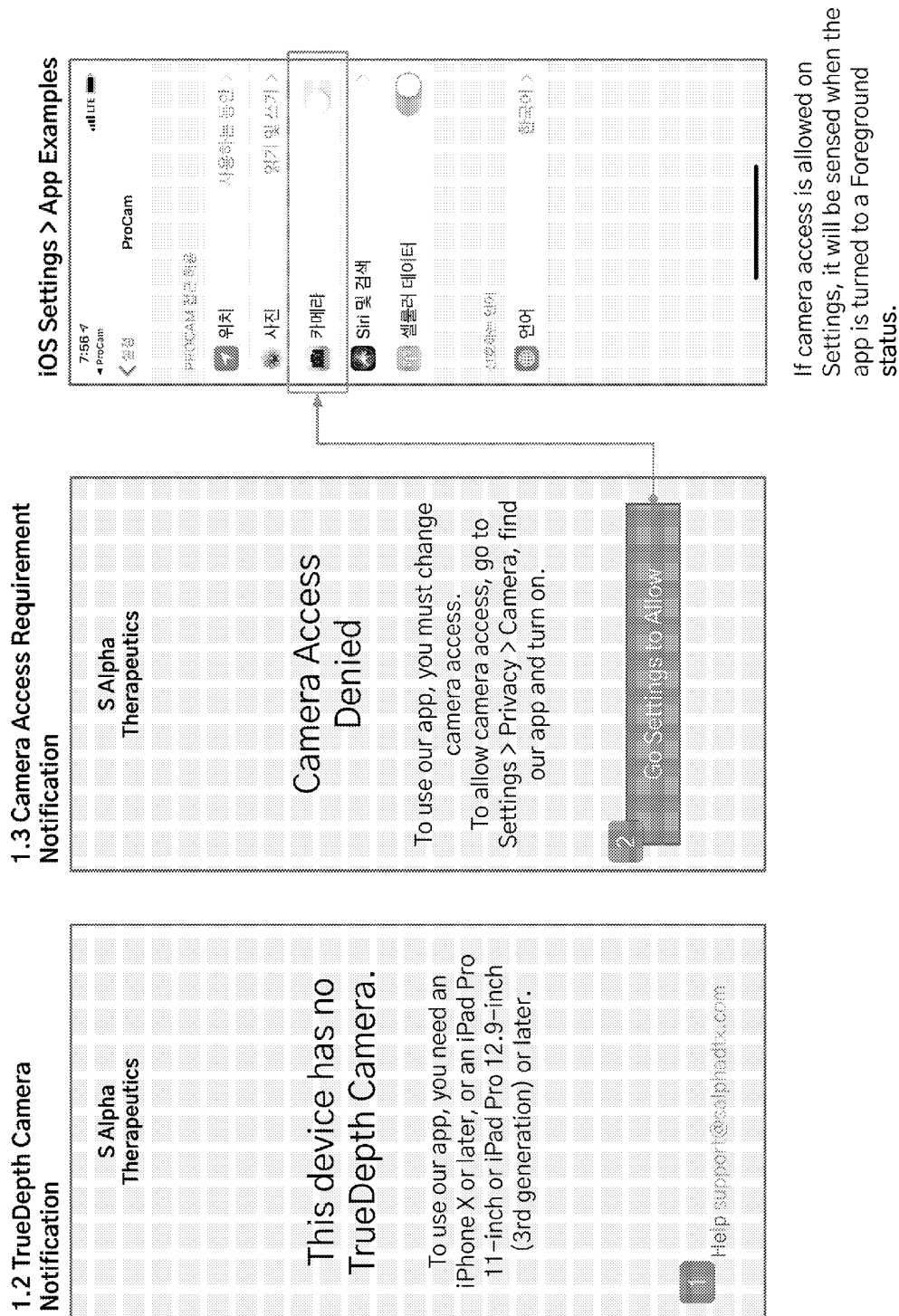


ID	1.2 Airplane Mode Notification (iOS pop-up)
----	---

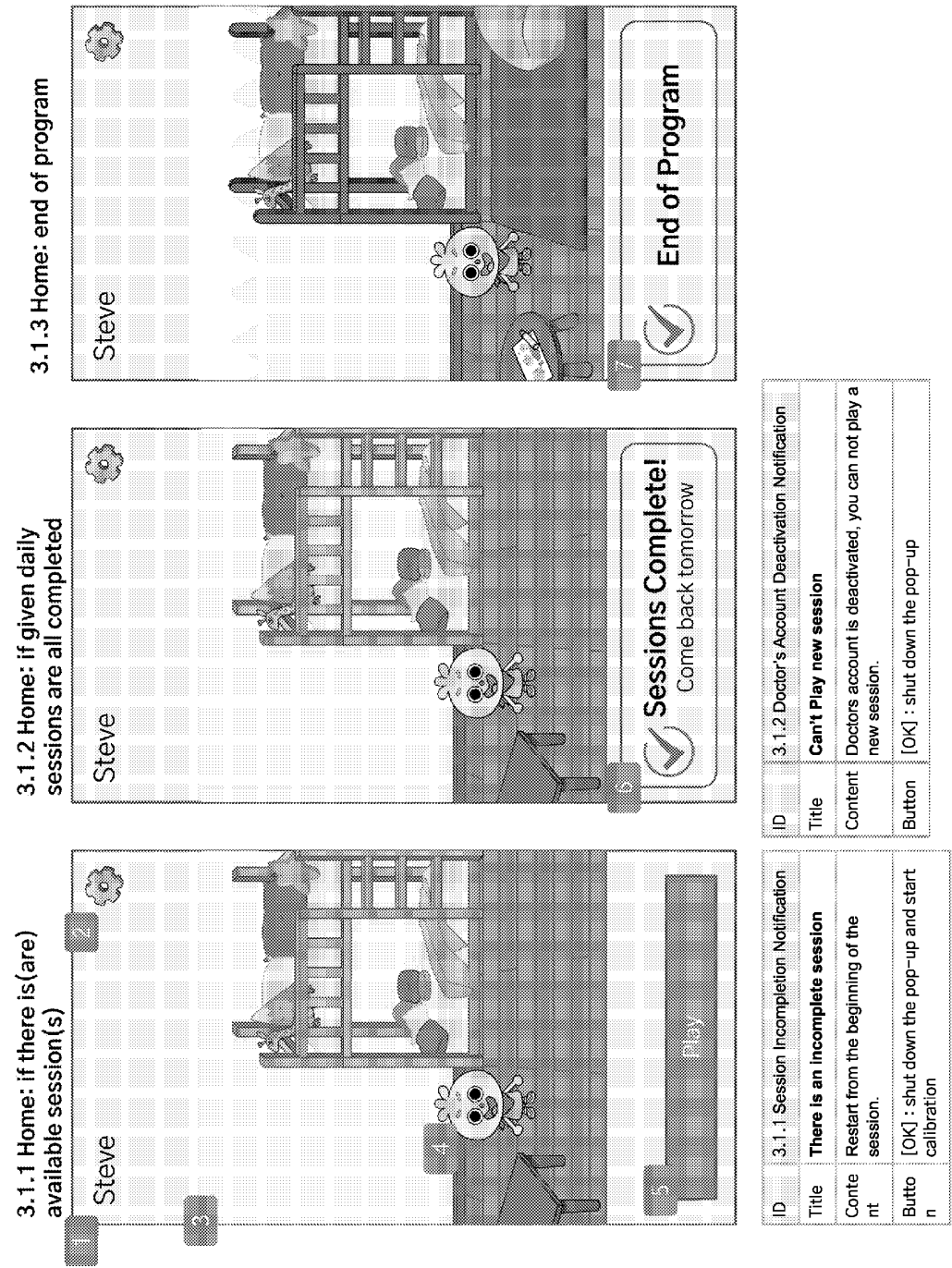


ID	1.3 No Network Notification
Title	No Internet Connection
Content	Please check your connection and try again.
Button	Button[OK] : close the pop-up
ID	1.4 Appstore Update Notification
Title	App Update
Content	New version is available. Please visit the App Store to update to the latest version.
Button	[Update] : Opens App Store > Moves to App Store app screen

[Fig. 22]



[Fig. 23]

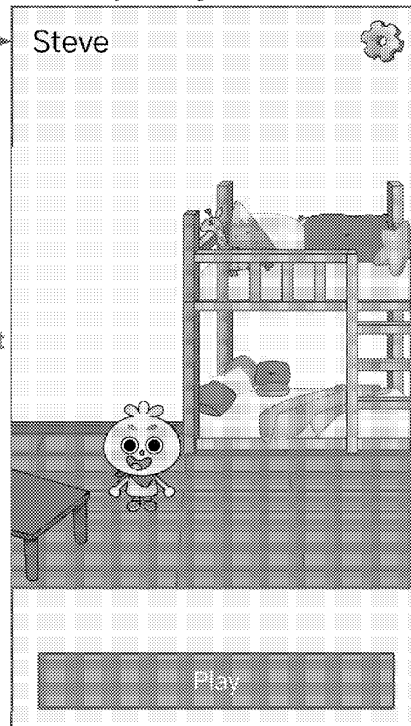


[Fig. 24]

**3.1.4 Requirement Notification
for Bright Environment**

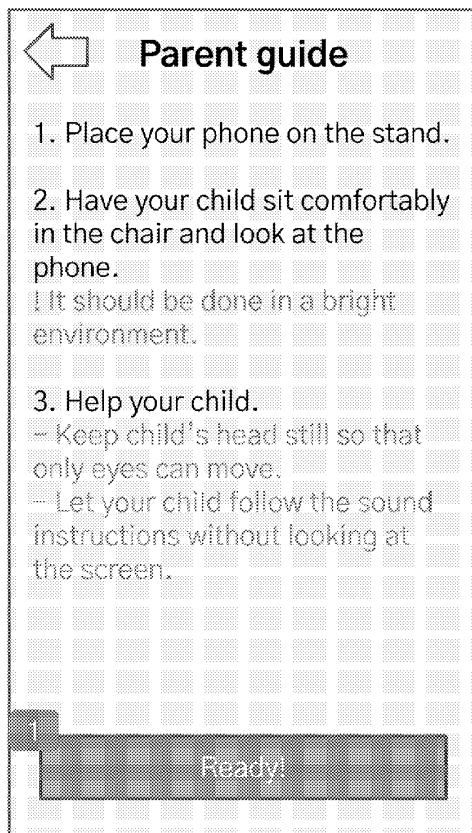
Perceives
Sufficient Light

Moves to home screen 3.1.1 or
3.1.2 depending on situation

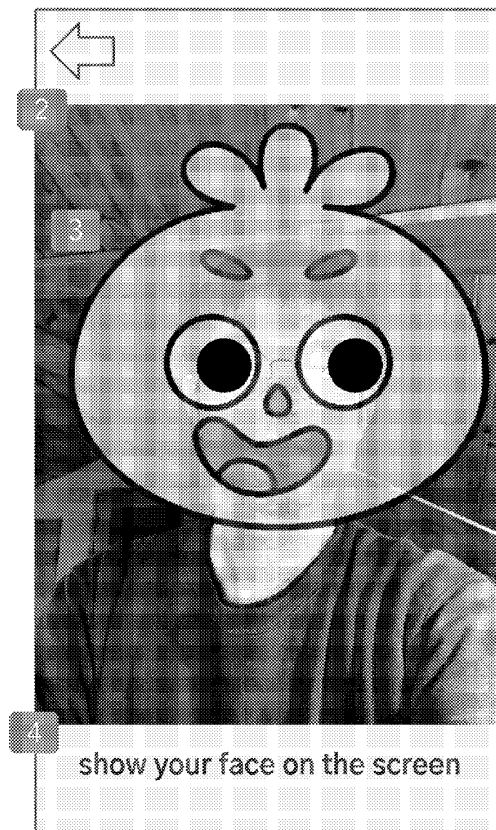


[Fig. 25]

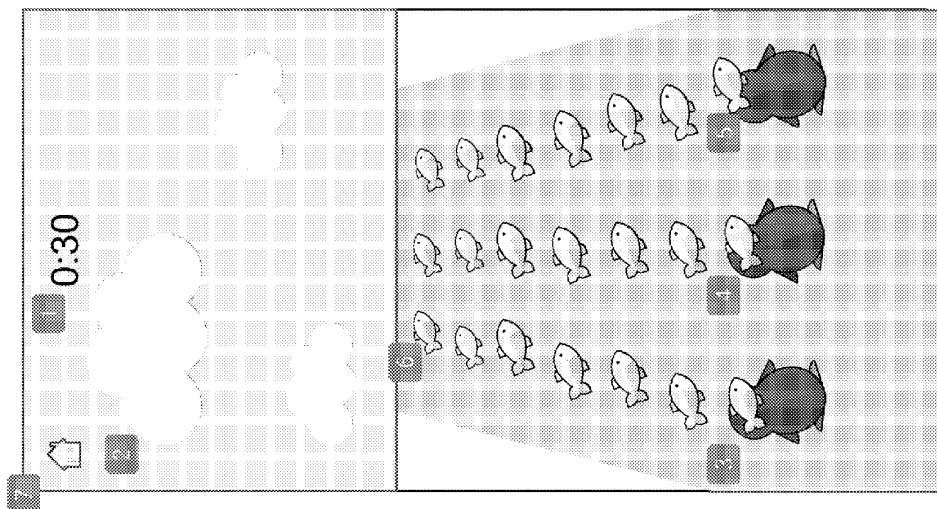
4.1.1 Calibration Notification



4.1.2 Calibration Process



[Fig. 26a]



Timer starts from 30 seconds. The game finishes when the timer reaches 0 second.
 Three cloud icons are in the sky, each moving towards the right side at a slightly different pace.
 The penguin appears from the middle. It is animated to waddle, always moving from side to side per 500 ms.

The penguin can locate in either of the three directions referred to as left side, middle, right side. The movement of the penguin is controlled by the eyes.

However, the movement is only triggered when the user stares at a single direction for more than 800 ms.

For example, if the penguin is on the left side and the user stares at the right side for more than 800 ms, the penguin will move to the middle. If the user again stares at the right side for more than 800 ms, the penguin will move to the right side.

For every move, there will be background sound to notify the move.

Sound: <https://freesound.org/people/beatboxer/sounds/402468/>

When the session starts, fish will appear for every 3 seconds.

(The time is subject to change.)

A total of 10 fish will appear on the screen. The fish will be located evenly in all three sides so that the user can execute sufficient eye exercise.

Fish gets closer (larger) to the penguin as can be seen from the image. The closeness is classified into 7 stages. The fish approaches to the penguin, one stage per one second.

When the fish reaches at stage 7 (the penguin's location), the penguin can eat the fish. (Success) If the penguin eats the fish, the fish disappears and sound effect is played.

(<https://freesound.org/people/beatboxer/sounds/402468/>)

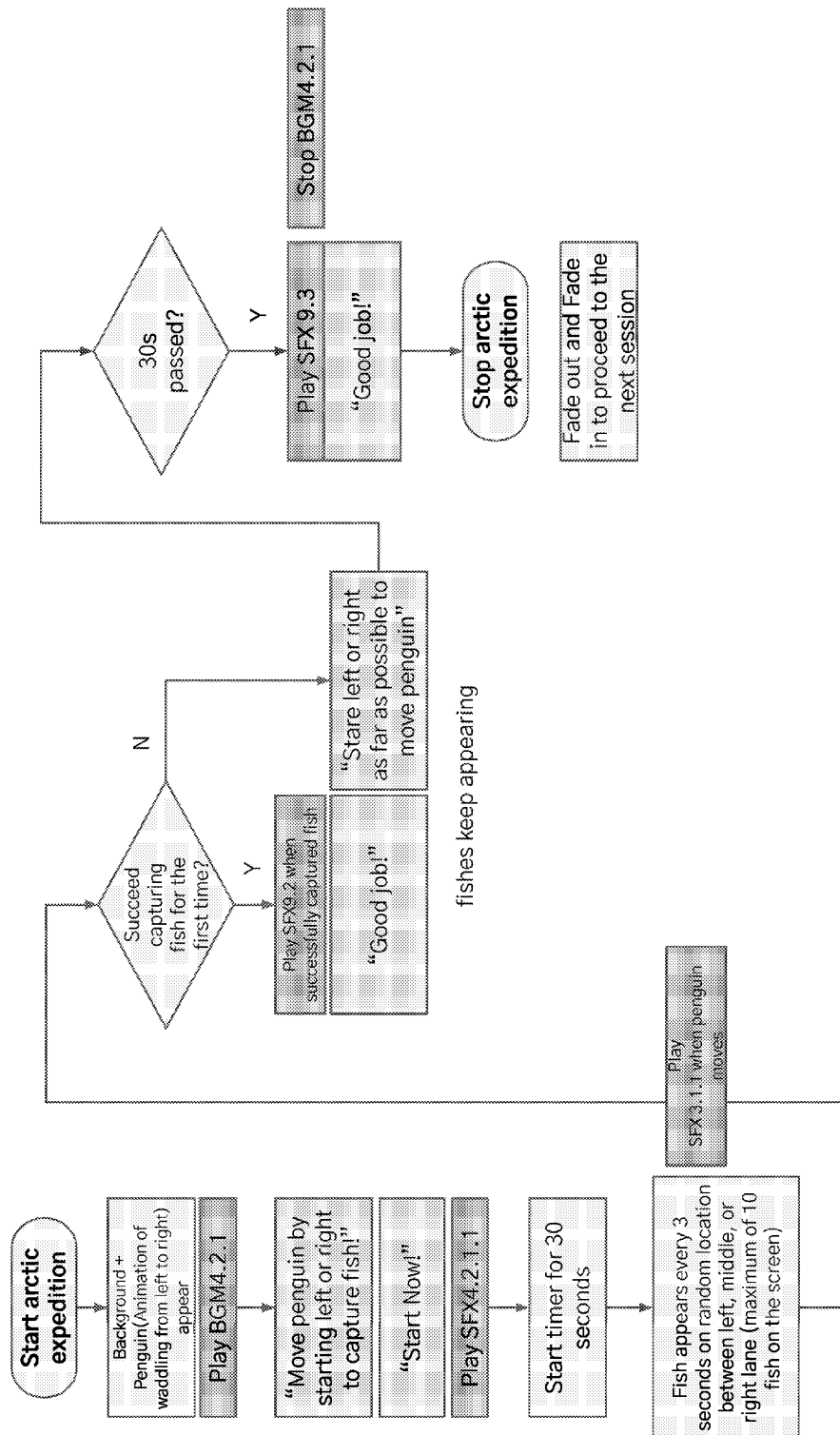
If the penguin does not eat the fish even if it reached stage 7 location for more than 1.5 seconds, the fish automatically disappears

Estimation: 30 seconds

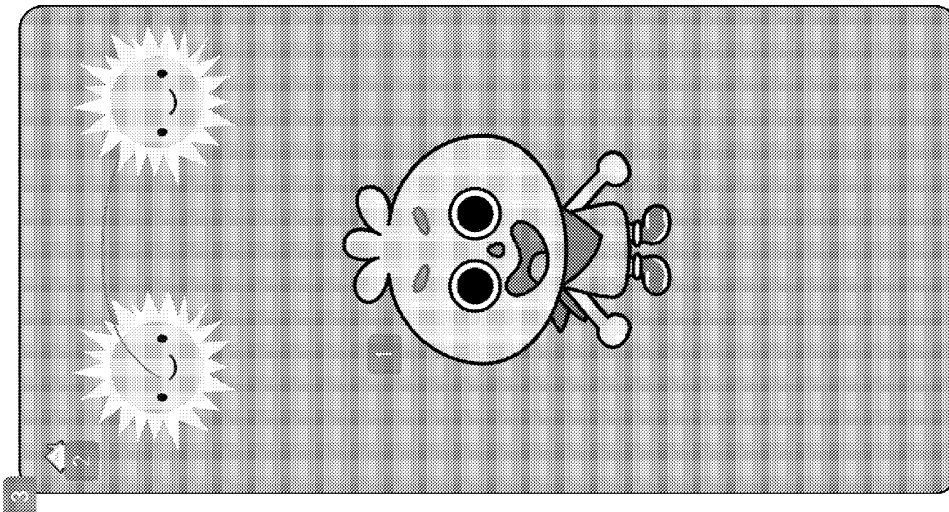
Adds a button which allows to stop the session during the program.

When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 26b]

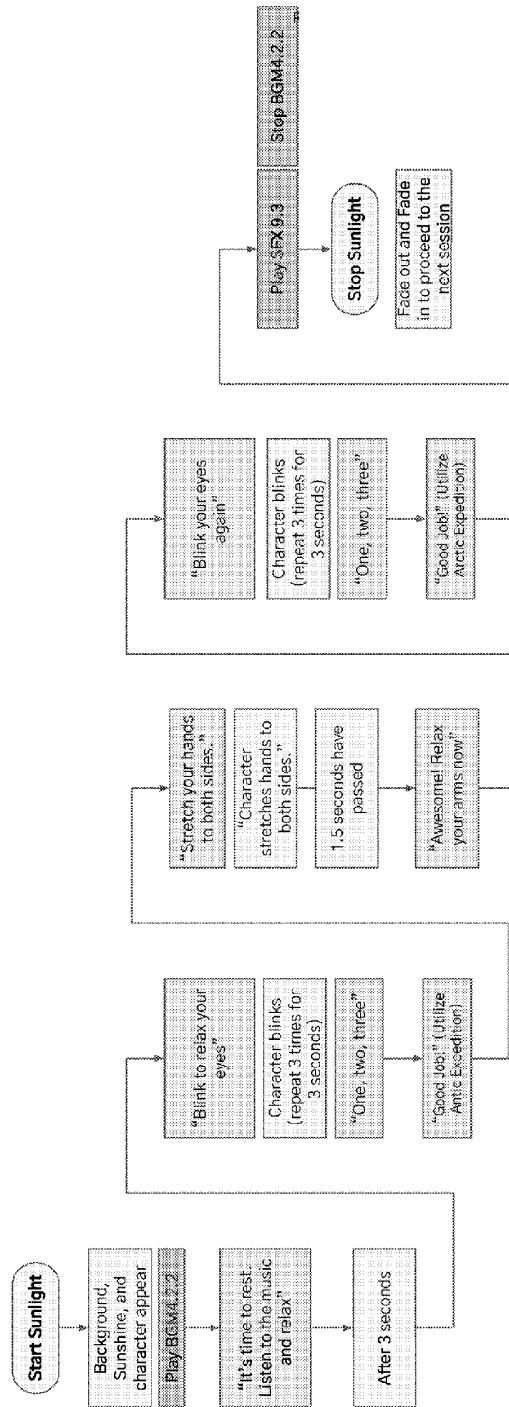


[Fig. 27a]

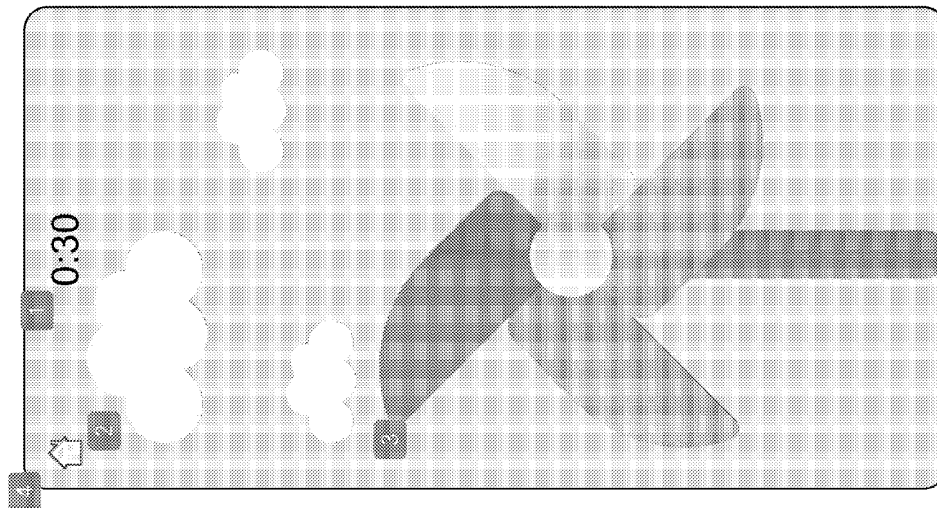


- 1 The character appears in the middle.
 - 2 The sun icon moves alongside the red line for 30 seconds. (very slowly...)
- According to voice guidance,
- 3 the character blinks its eyes.
 - 4 the character stretches out its arms to both sides.
- Estimation: 30 seconds
- 5 Adds a button which allows to stop the session during the program.
- When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 27b]



[Fig. 28a]



1 The timer starts at 30 seconds and ends at 0 second.

2 There are three cloud icons in the sky moving towards the right side, each at a slightly different pace.

3 The pinwheel takes basic movements to show that it can spin.

Basic movements : Spin for about 10 degree and then return back to its default status.

The pinwheel can spin either clockwise or counter clockwise .

If the voice guidance asks to spin clockwise,

the user exercises his/her eyes in a clockwise circle, and the pinwheel will spin.

There will be background sound effect to let the patient know if it is working.

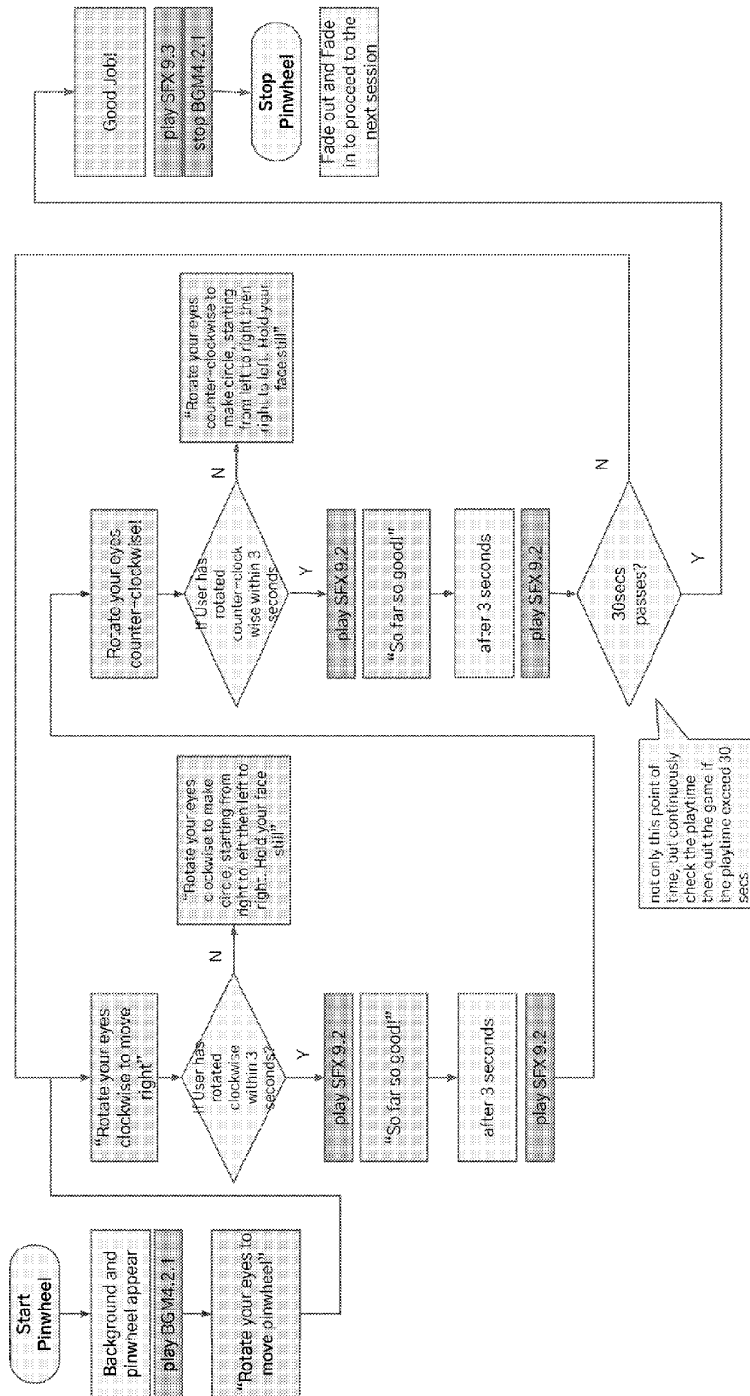
The exercise lasts for 30 seconds, by repeating 3-second long clockwise eye exercise and 3-second long counter clockwise eye exercise.

Estimation: 30 seconds

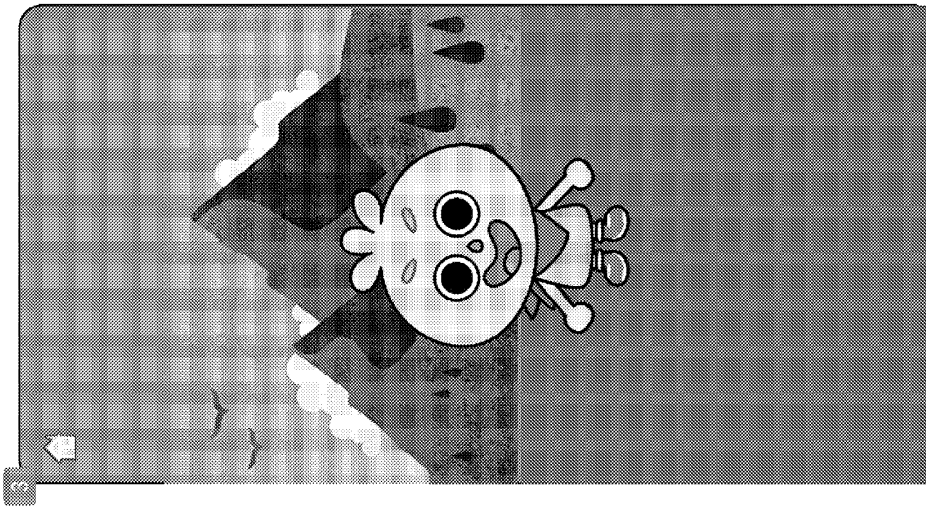
4 Adds a button which allows to stop the session during the program.

When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 28b]



[Fig. 29a]



■ The character appears as shown in the image in the left.

■ The character behaves as if it lightly breathes in and out.

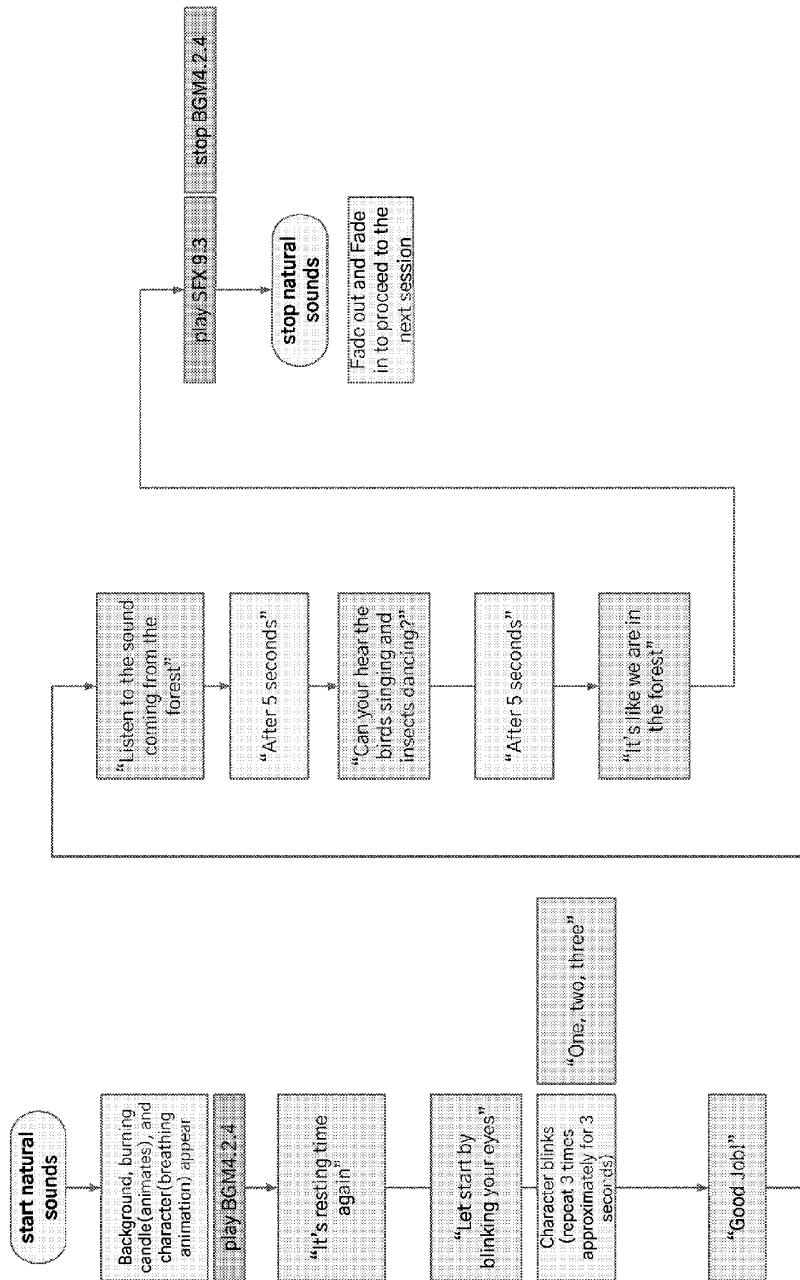
According to voice guidance,

■ The character blinks its eyes

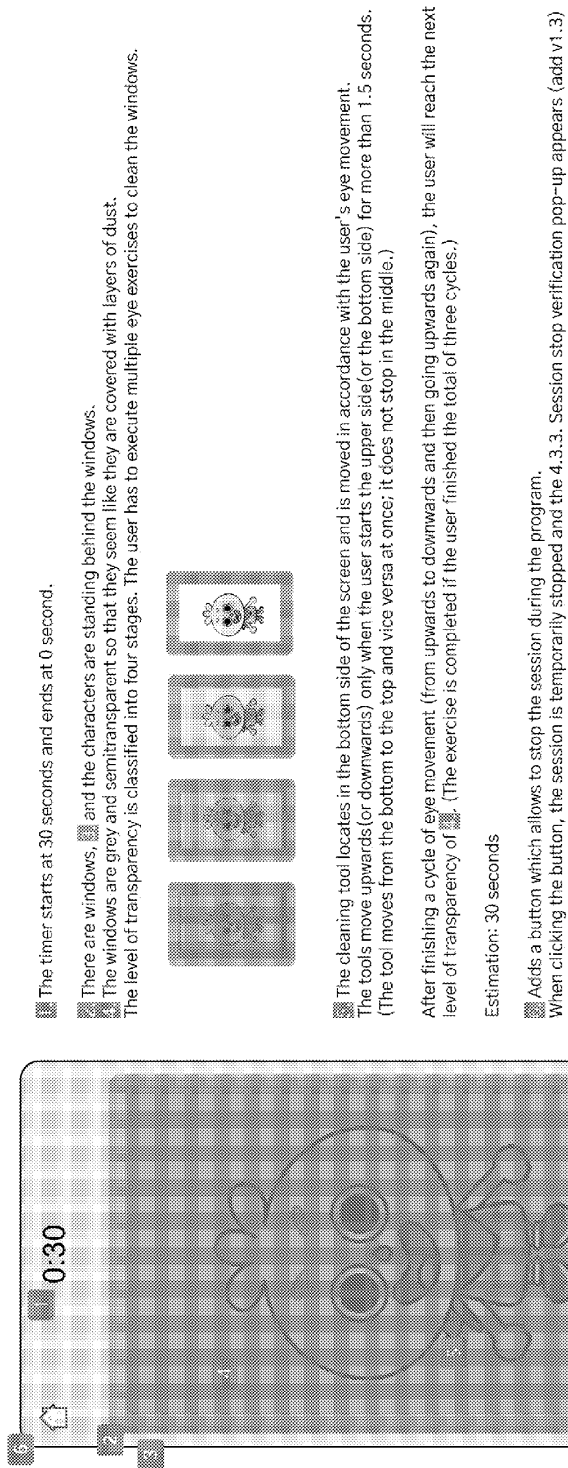
Estimation: 30 seconds

■ Adds a button which allows to stop the session during the program.
When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

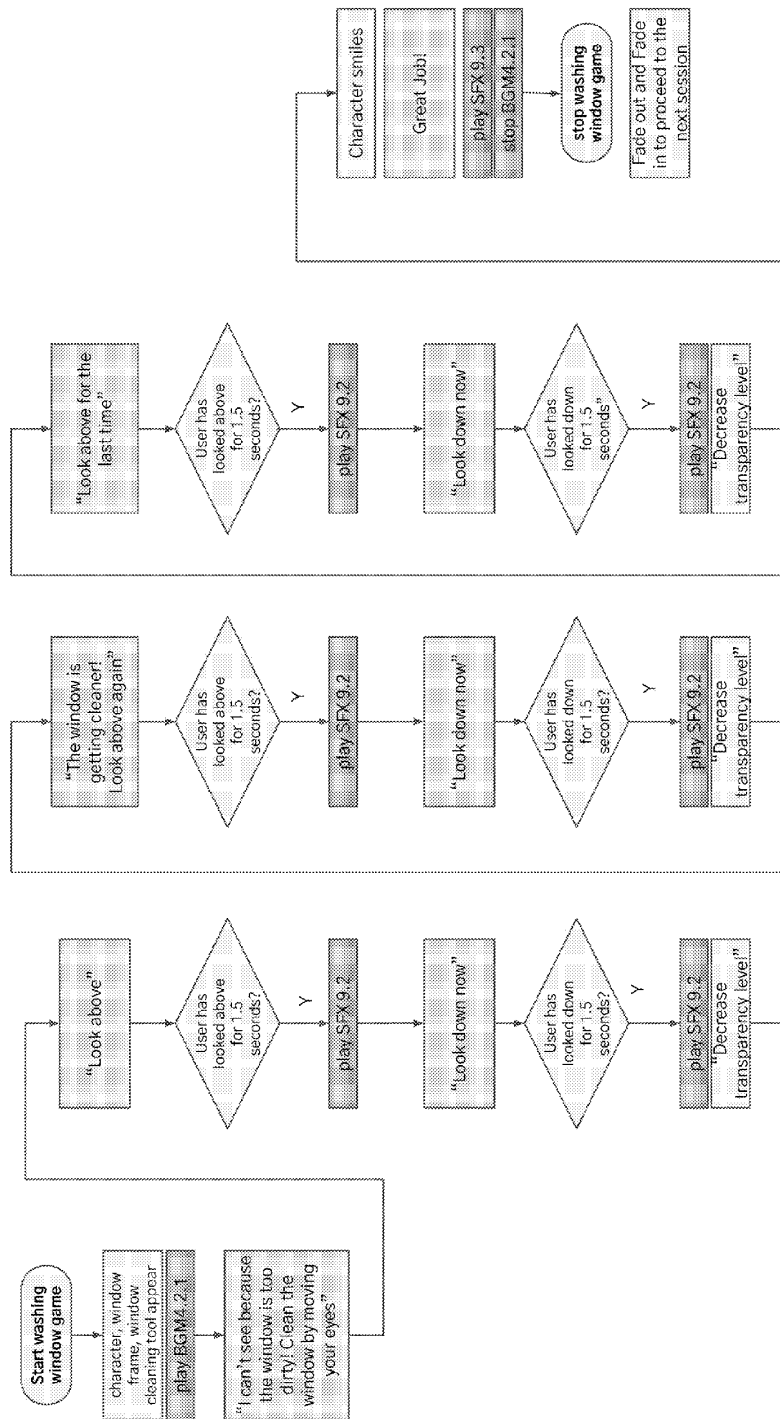
[Fig. 29b]



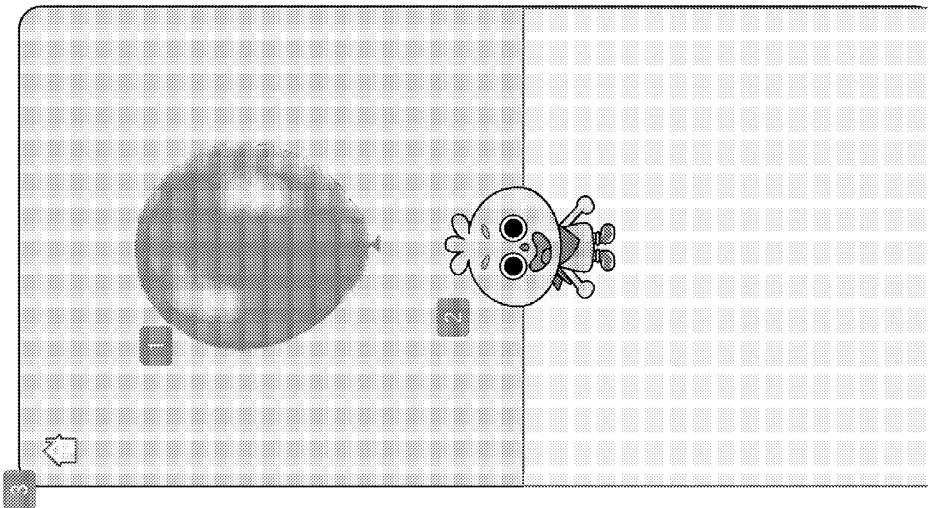
[Fig. 30a]



[Fig. 30b]



[Fig. 31a]



1 The balloon and 2 the character appear as shown in the image in the left.

3 The balloon moves up and down per 500 ms so that it seems as if it is lightly floating.

4 The character behaves as if it lightly breathes in and out.

According to voice guidance,

When the user breathes in 5 the balloon gets bigger, 6 and the character behaves as if it lightly, too, is breathing in. (2 seconds)

When the user breathes out 7 the balloon gets smaller, 8 and the character behaves as if it lightly, too, is breathing out. (2 seconds)

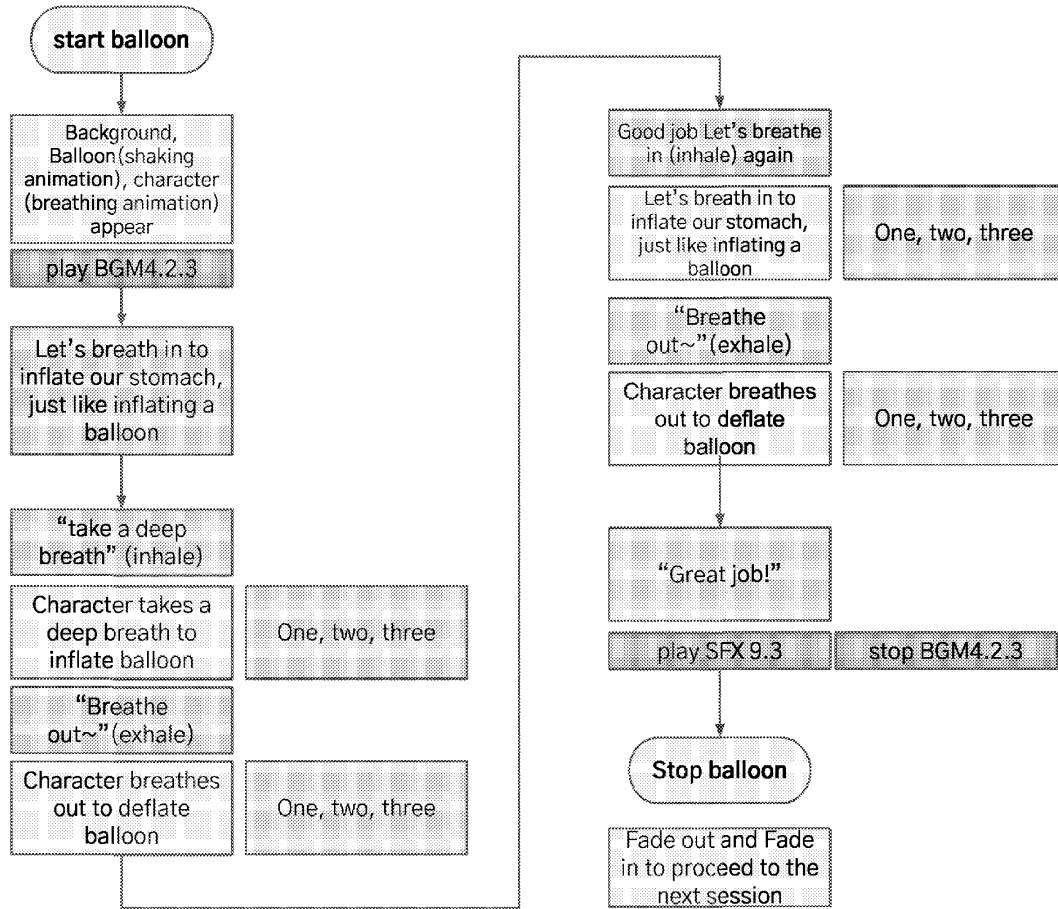
A total of three sets needs to be completed.

Reference video: <https://www.youtube.com/watch?v=2PcMvEW5WA>

Estimation: 30 seconds

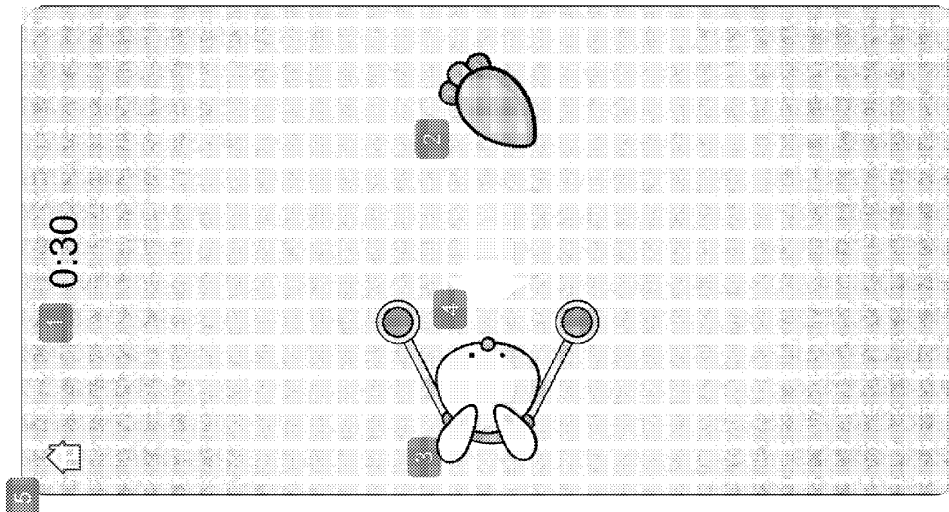
9 Adds a button which allows to stop the session during the program.
When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 31b]

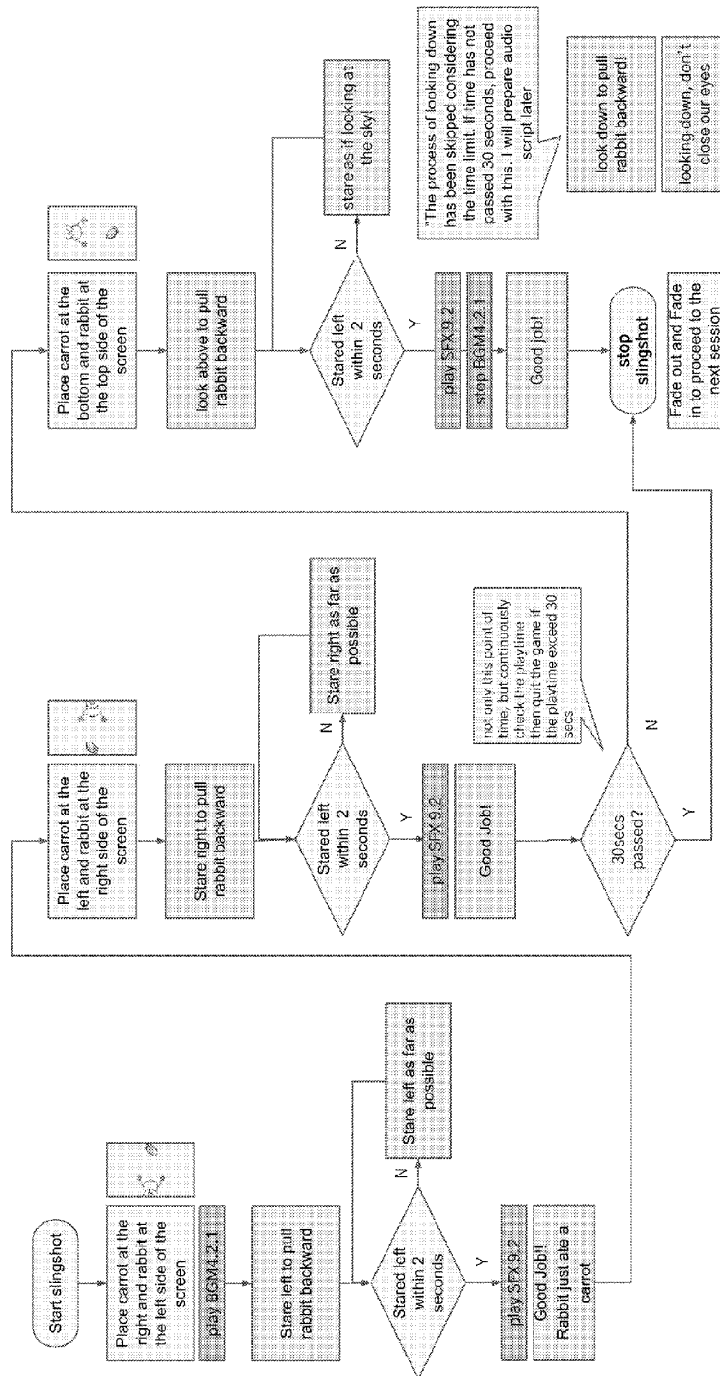


[Fig. 32a]

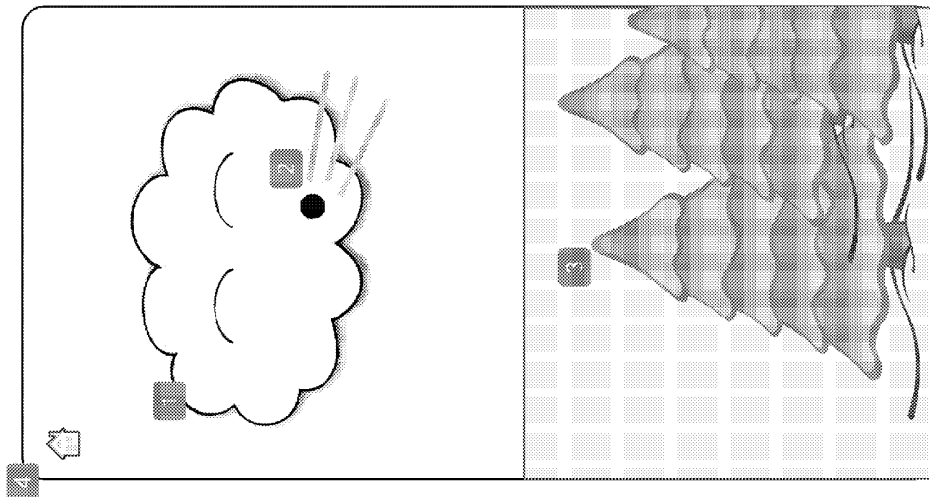
- The timer starts at 30 seconds and ends at 0 second.
 - The carrot locates at 12, 3, 6, 9 o' clock position.
 ■ When the carrot is at 12 o'clock – ■ The rabbit and the slingshot is at 6 o'clock.
 - Carrot 12 o'clock – Rabbit 6 o'clock
 - Carrot 3 o'clock – Rabbit 9 o'clock
 - Carrot 6 o'clock – Rabbit 12 o'clock
 - Carrot 9 o'clock – Rabbit 3 o'clock
 - The slingshot and the rabbit move alongside the user's eye movement.
 ■ When the eyes move for a certain direction for more than 800 ms, the slingshot moves counter side the carrot, and when the eyes stay unmoved for 2 seconds, the rabbit moves towards the carrot. (Refer The slingshot and the bird from Angry Bird)
 - When the rabbit approaches and touches the carrot, the rabbit stops moving towards and the carrot disappears.
 - Uses the arrow mark to indicate the direction of the slingshot.
- Estimation: 30 seconds
- Adds a button which allows to stop the session during the program.
 ■ When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)



[Fig. 32b]

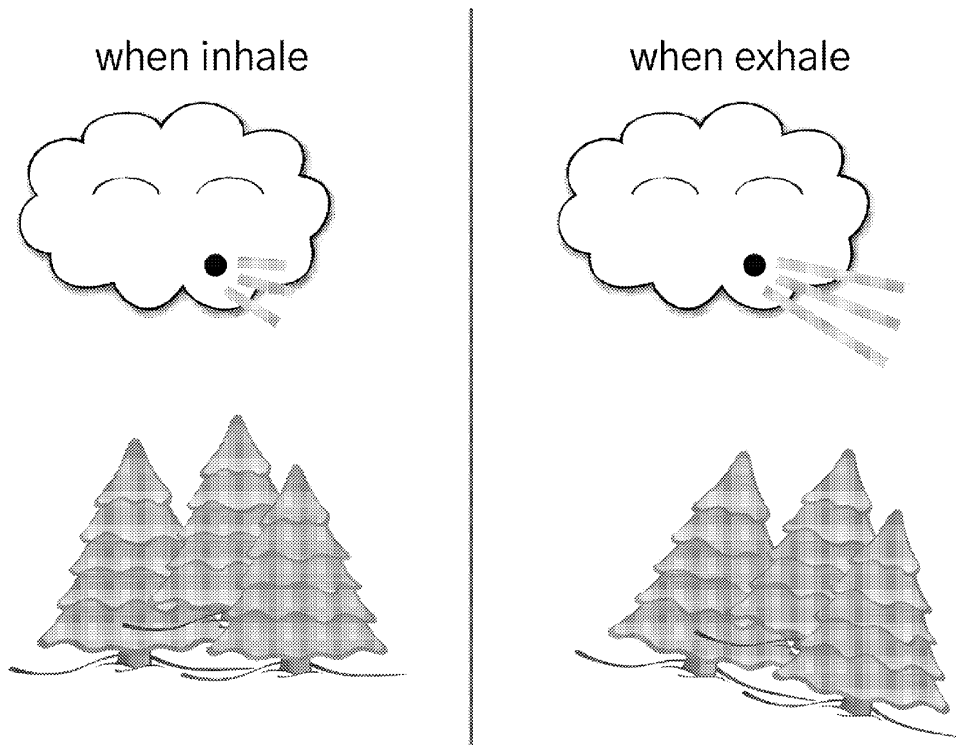


[Fig. 33a]

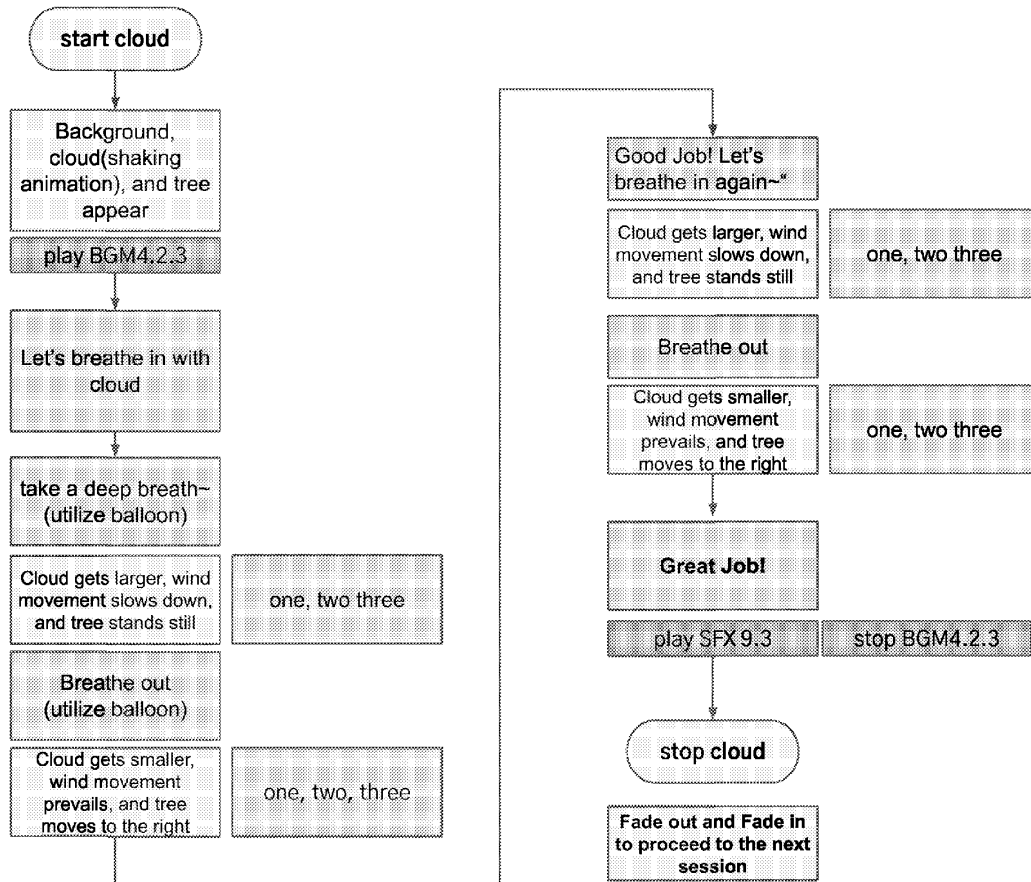


- 1 A cloud character appears
The cloud character seems as if it is actually blowing
The cloud character moves when it blows (when the user breathes out)
 - 2 The cloud character gets larger and smaller for 105% every 300 ms so that it seems as if it is lightly floating in the air.
According to the voice guidance,
When the character breathes in 2 it gets larger, 2 the lines get shorter, and 2 the tree stands firmly. (2 seconds)
When the character breathes out 2 it gets smaller, 2 the lines get longer, and 2 the tree leans towards the right side. (2 seconds)
 - 3 A total of two sets needs to be completed.
Estimation: 30 seconds
- Reference video: [KIDS.MEDITATION - COOLING OUT BREATH](#)
- 4 Adds a button which allows to stop the session during the program.
When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

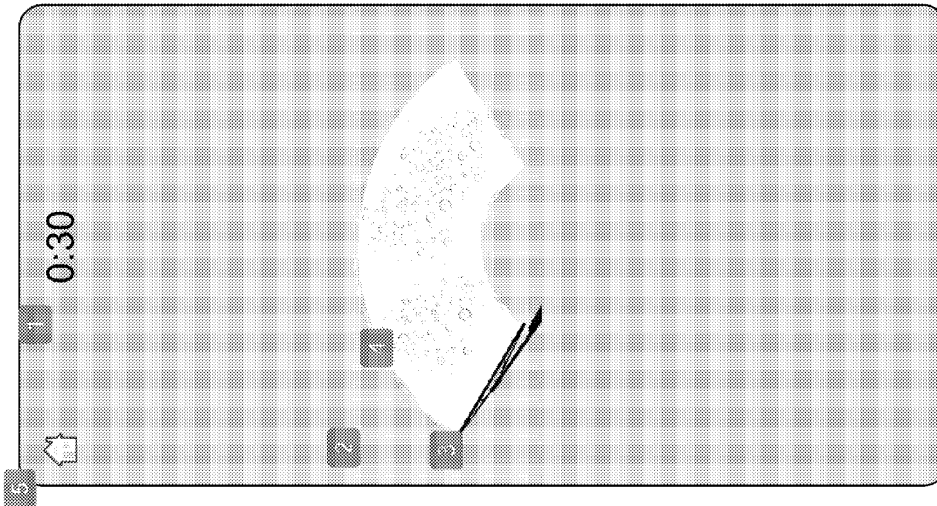
[Fig. 33b]



[Fig. 33c]



[Fig. 34a]



5 The timer starts at 30 seconds and ends at 0 second.

6 Place the windshield and 7 the wiper in the middle of the screen.

- Make 8 the wiper move from side to side as the user's eyes move.

9 Spray some water on the windshield so that it seems like raining.

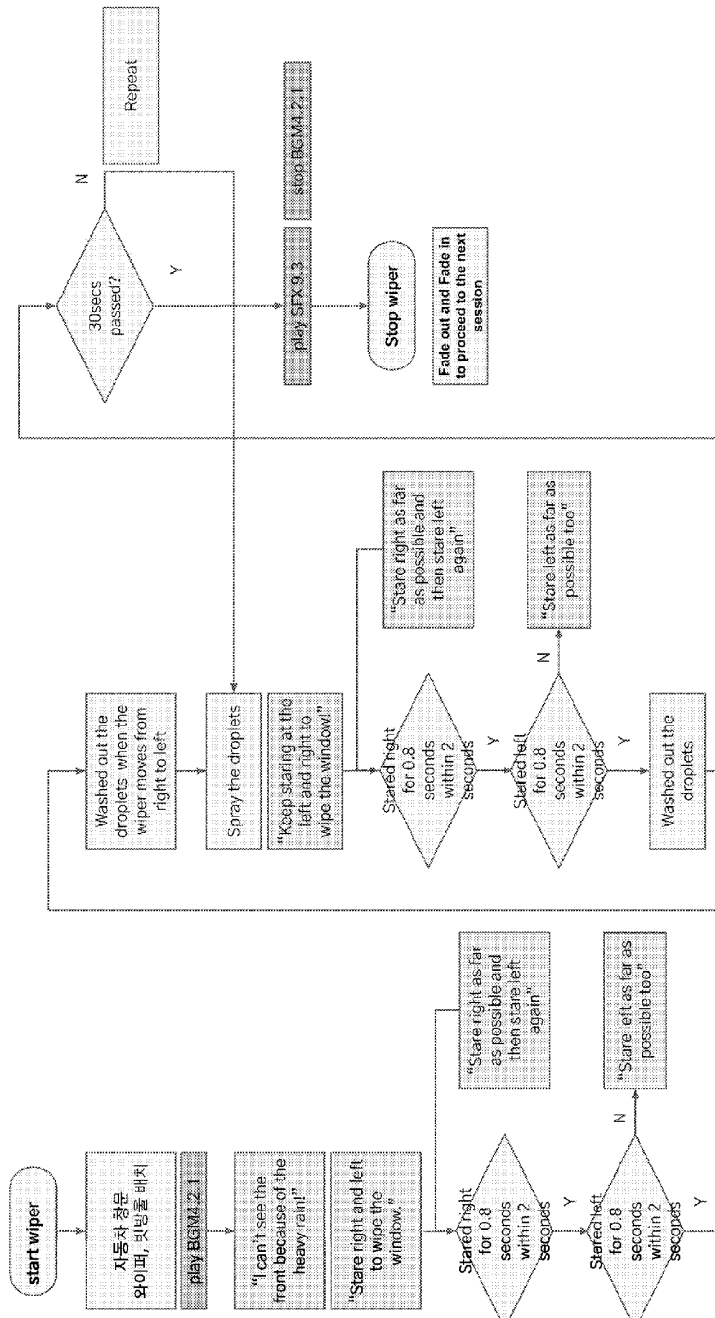
- Once the rain is dropped on the windshield, the user can wash them away by making the wiper(the eyes) move from right to left and right again.
- After the droplets are washed out, new droplets are sprayed on the windshield and the user continues to play the game and exercise his/her eyes.

Make a clear difference between the wiped and the non-wiped windshield images to markedly show that the droplets disappear after wiping out. (Refer to the image on the right)

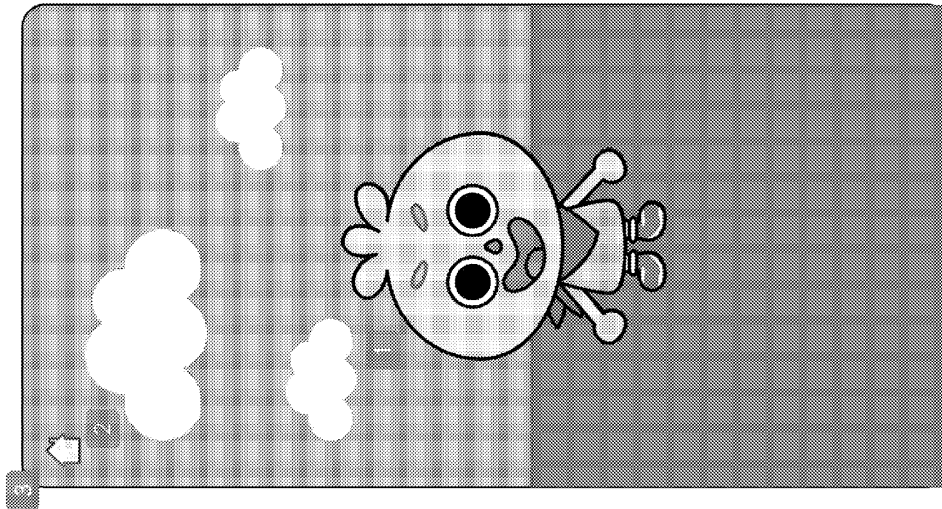
Estimation: 30 seconds

10 Adds a button which allows to stop the session during the program.
When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 34b]



[Fig. 35a]



The character appears in the middle of the screen.

There are about three cloud icons in the sky all of which move towards the right side, each at a slightly different pace.

According to the voice guidance,

The character blinks its eyes.

The character stretches its arms.

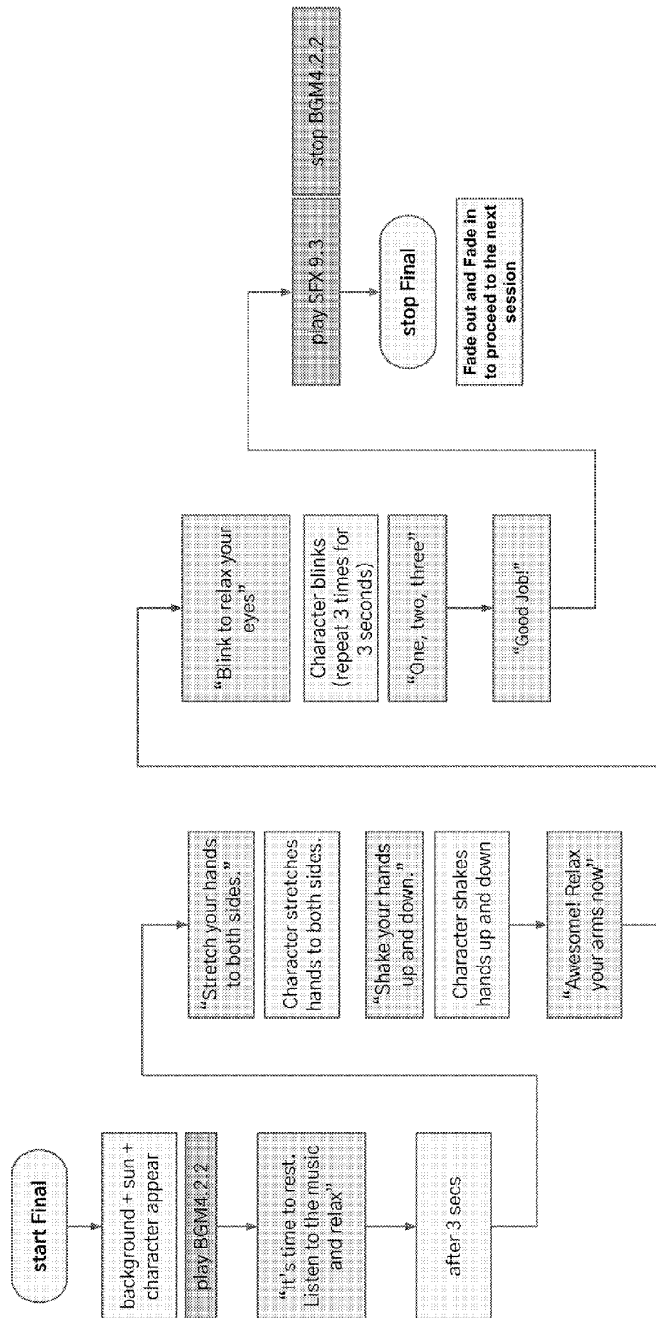
The character shakes the arms and hands.

Estimation: 30 seconds

Adds a button which allows to stop the session during the program.

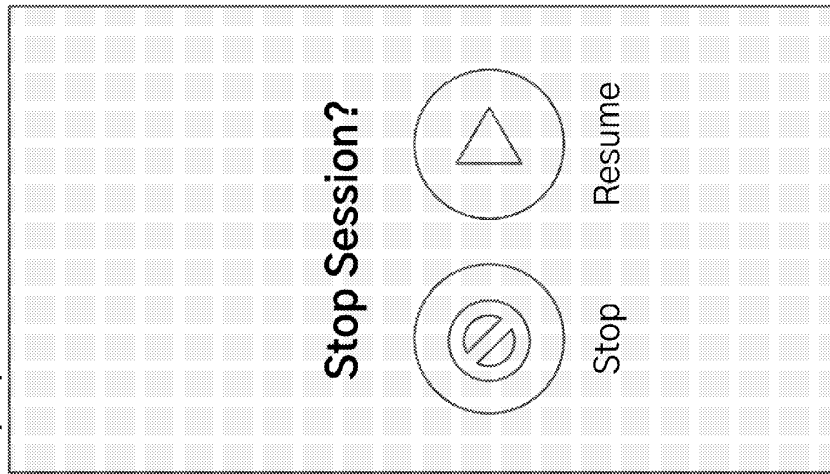
When clicking the button, the session is temporarily stopped and the 4.3.3. Session stop verification pop-up appears (add v1.3)

[Fig. 35b]

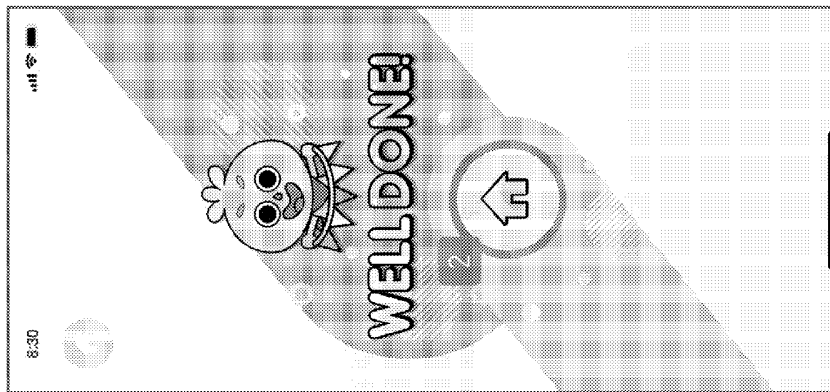


[Fig. 36]

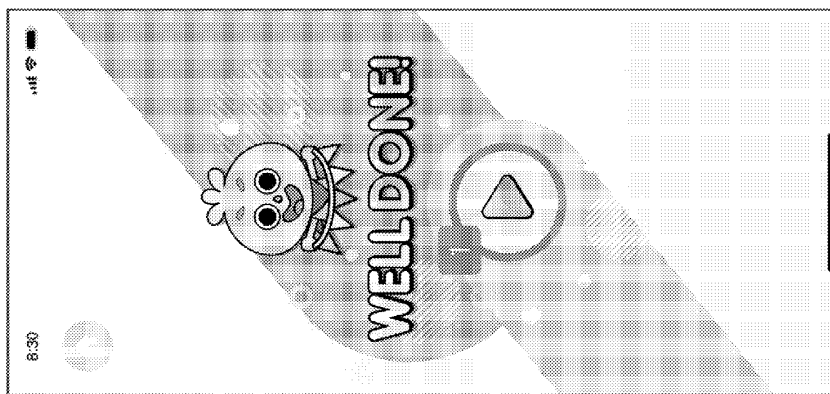
4.3.3 Session Stop Verification Pop-up



4.3.2 Daily Session Completion

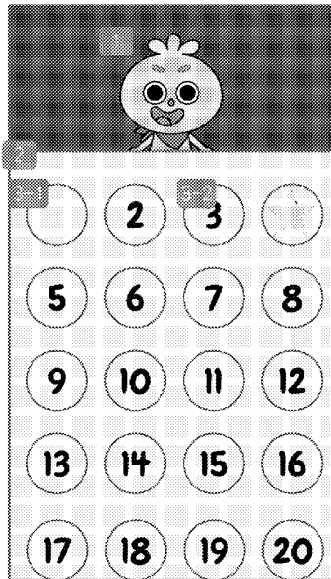


4.3.1 Single Session Completion



[Fig. 37a]

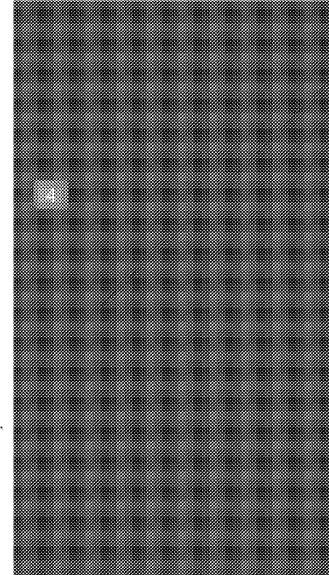
4.4.1 Room Decoration Board



3-1. Moves to 4.4.2 after 3 seconds for room decoration days with items.
 3-2. Adds a star mark on the date after a second for room decoration days without items.
 Moves to home screen two seconds later

The current date appears on the very top
 Can be scrolled down to number 84.

4.4.2 Room Decoration Item Acquisition

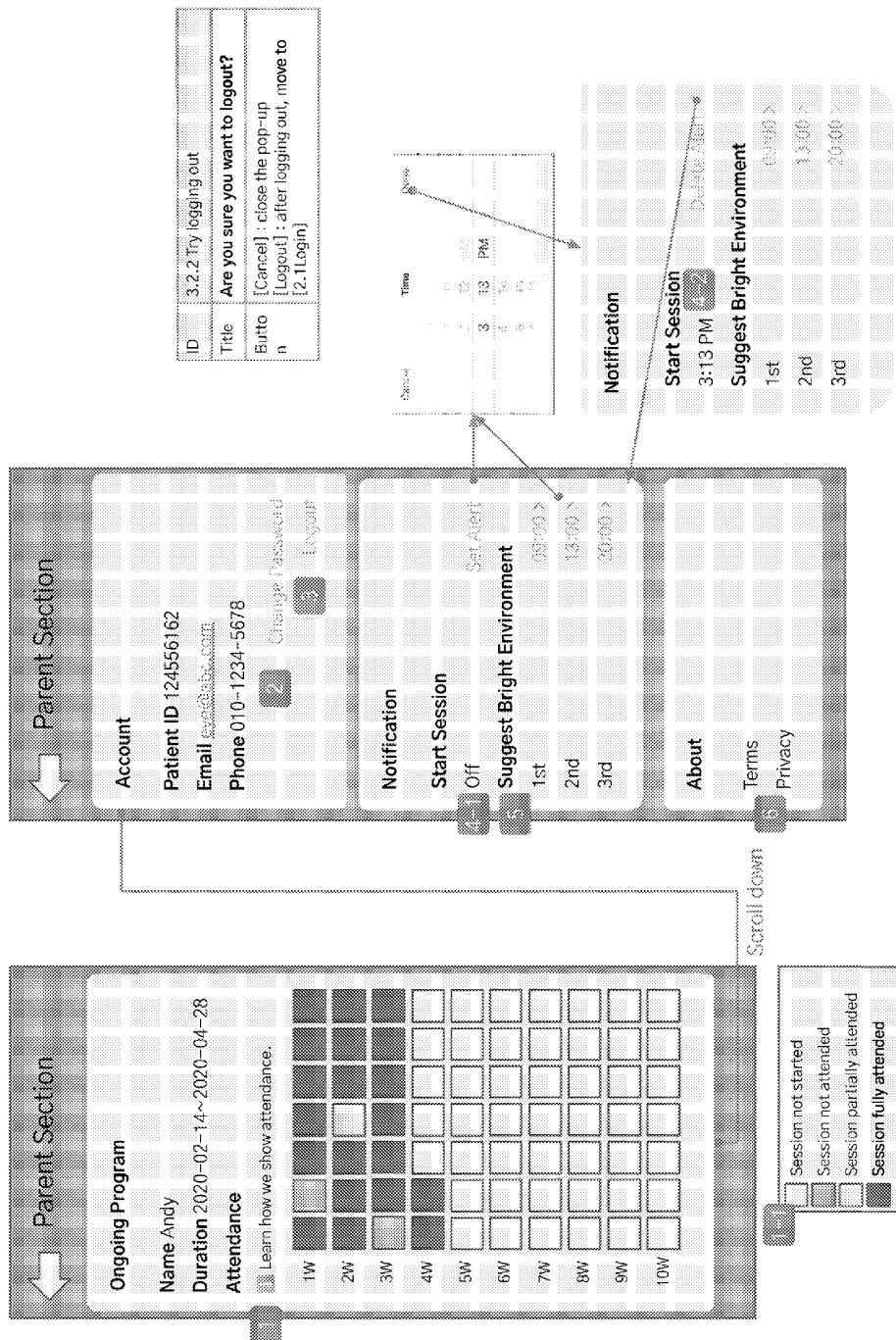


Automatically moves to home screen after 3 seconds
 <The item is added in the room of home screen>

[Fig. 37b]

Day	Item	Day	Item
day 1	Bed	day 41	Table > Items on the table
day 4	Table	day 45	So'a
day 7	Carpet	day 49	Closet > Globe on the close
day 10	Table > Chair	day 53	TV
day 13	Clock	day 57	Window > Curtain
day 16	Bed > Bunk bed	day 61	Dog
day 19	Closet	day 65	Trash bin
day 22	Toy train	day 69	Cabinet next to the bed > Fish tank on the cabinet
day 25	Blackboard	day 73	Slide
day 29	Soccer ball	day 77	Frame
day 33	Dresser next to the bed	day 81	Logo
day 37	Window	day 84	Cat

[Fig. 38]



[Fig. 39]

← Change Password

Current Password

New Password

Use at least 8 characters.

Confirm New Password

1-1 Cancel

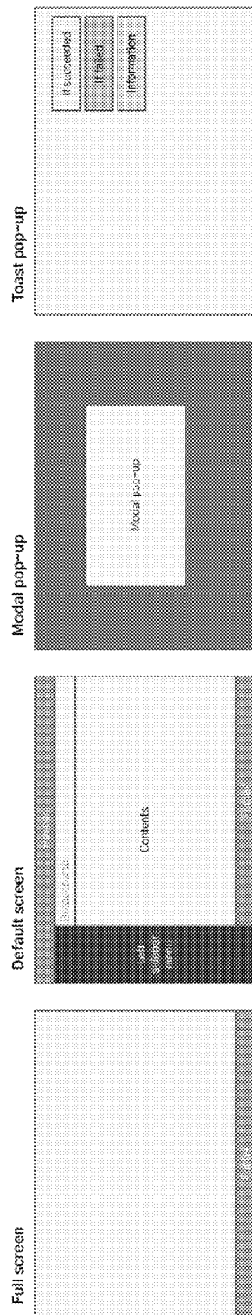
1-2 Change Password

ID	3.2.2.1 Wrong password
Title	Current password is Wrong.
Button	[OK] : close the pop-up
ID	3.2.2.2 Inadequate password
Title	Use at least 8 characters.
Button	[OK] : close the pop-up
ID	3.2.2.3 Mismatch between new password and confirm new password
Title	The passwords you entered do not match.
Button	[OK] : close the pop-up
ID	3.2.2.4 Change password
Title	The password has changed.
Button	[OK] : close the pop-up and move to 3.2.2 Parent Section

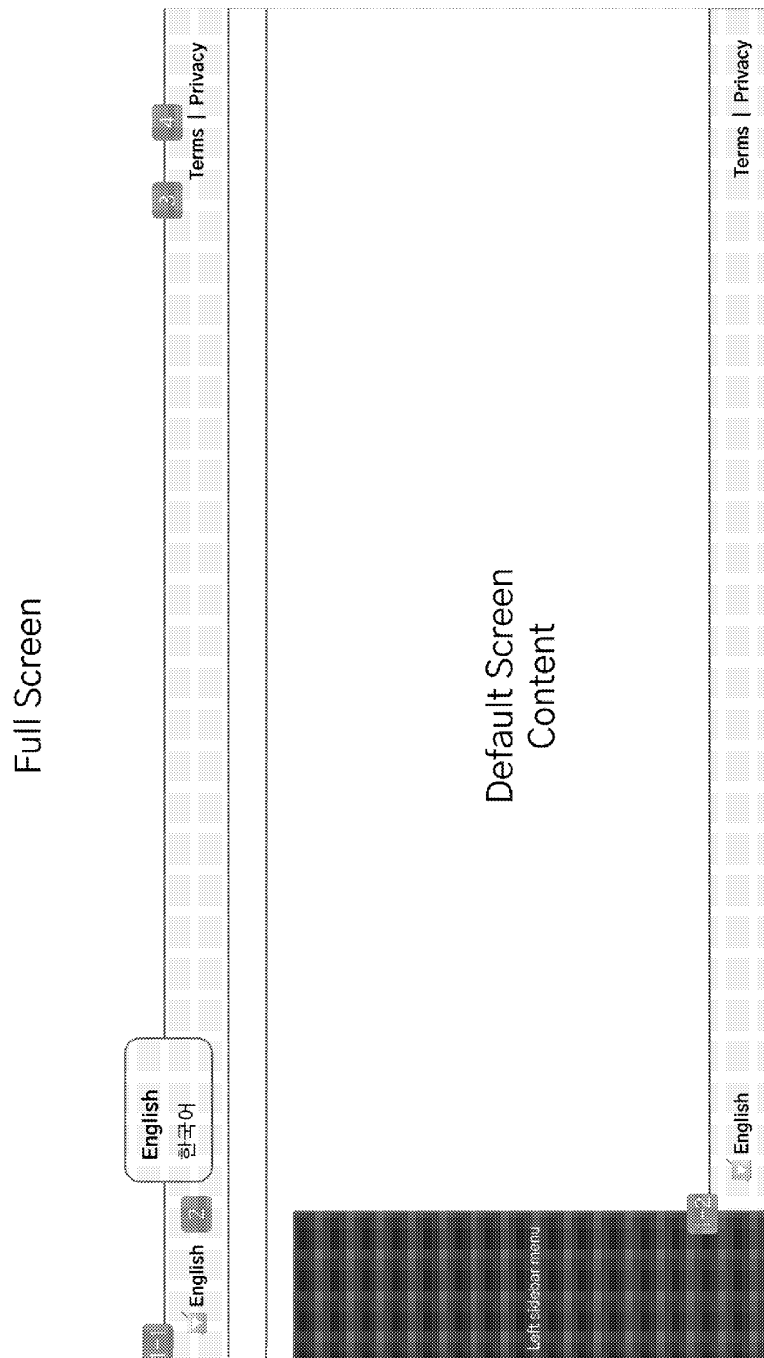
[Fig. 40]

Sending	Message	When push opened
The set time is part of the prescribed duration and the daily session has not been completed	It's time to exercise your eyes! Start eye exercises with your child now!	Enters to home screen after launching the app
When there is a paused session / An hour after pausing the session (However, the message is not sent after midnight 12) (add v1.3)	Please resume your eye exercise session! You have to complete the daily session.	Enters to home screen after launching the app
When there is a paused session / Three hours after pausing the session (However, the message is not sent after midnight 12) (add v1.3)	Please resume your eye exercise session! You have to complete the daily session.	Enters to home screen after launching the app
1. Suggest Bright Environment	Oops! Why is the room so dirty? Please open the app in a bright environment!	Moves to screen 3.1.4 after launching the app
2. Suggest Bright Environment	Dust and dirt dislikes bright environments! Please open the app in a bright environment!	Moves to screen 3.1.4 after launching the ap
3. Suggest Bright Environment	Why don't you turn on all the lights in your room? Please open the app in a bright environment!	Moves to screen 3.1.4 after launching the ap

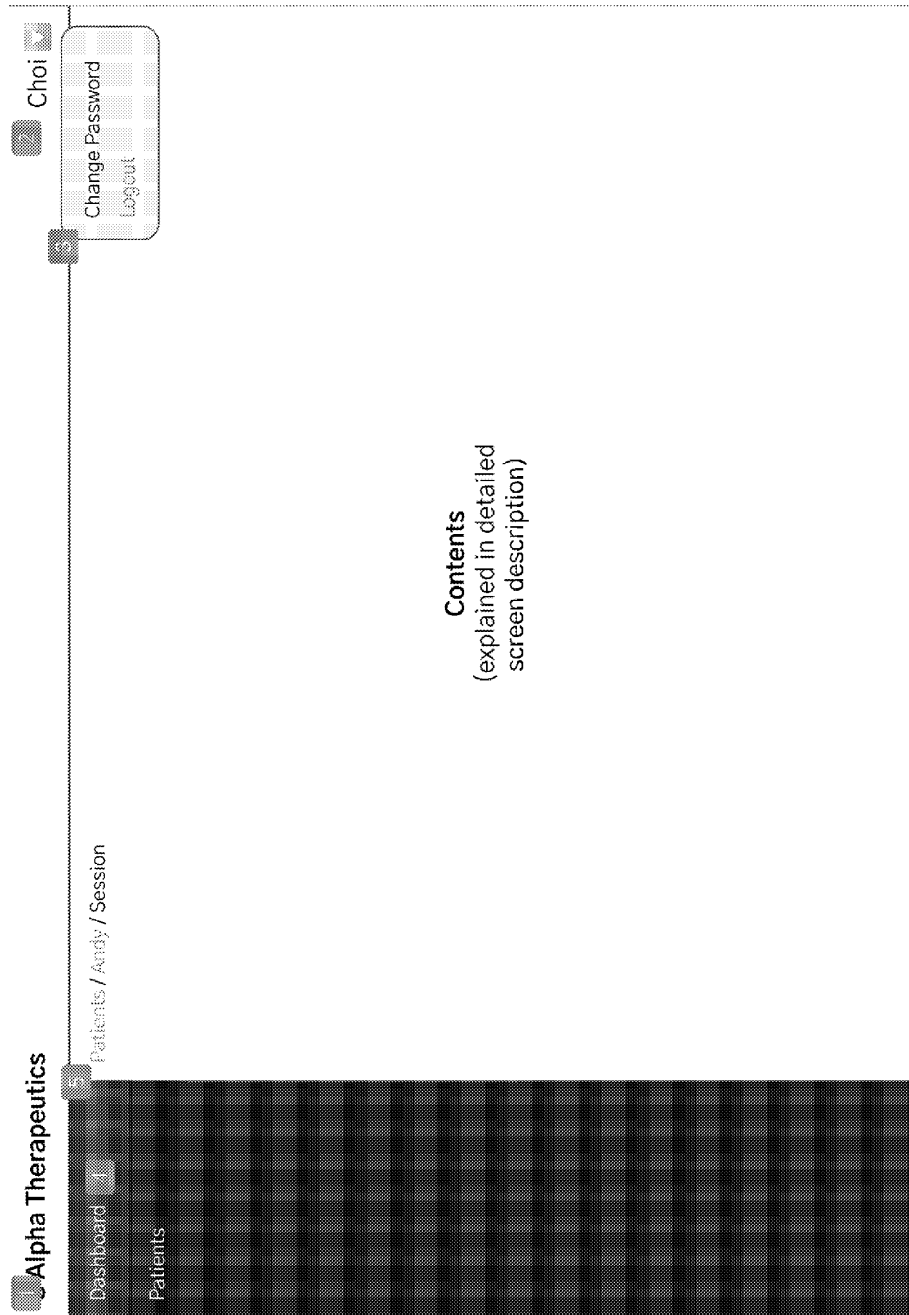
[Fig. 41]



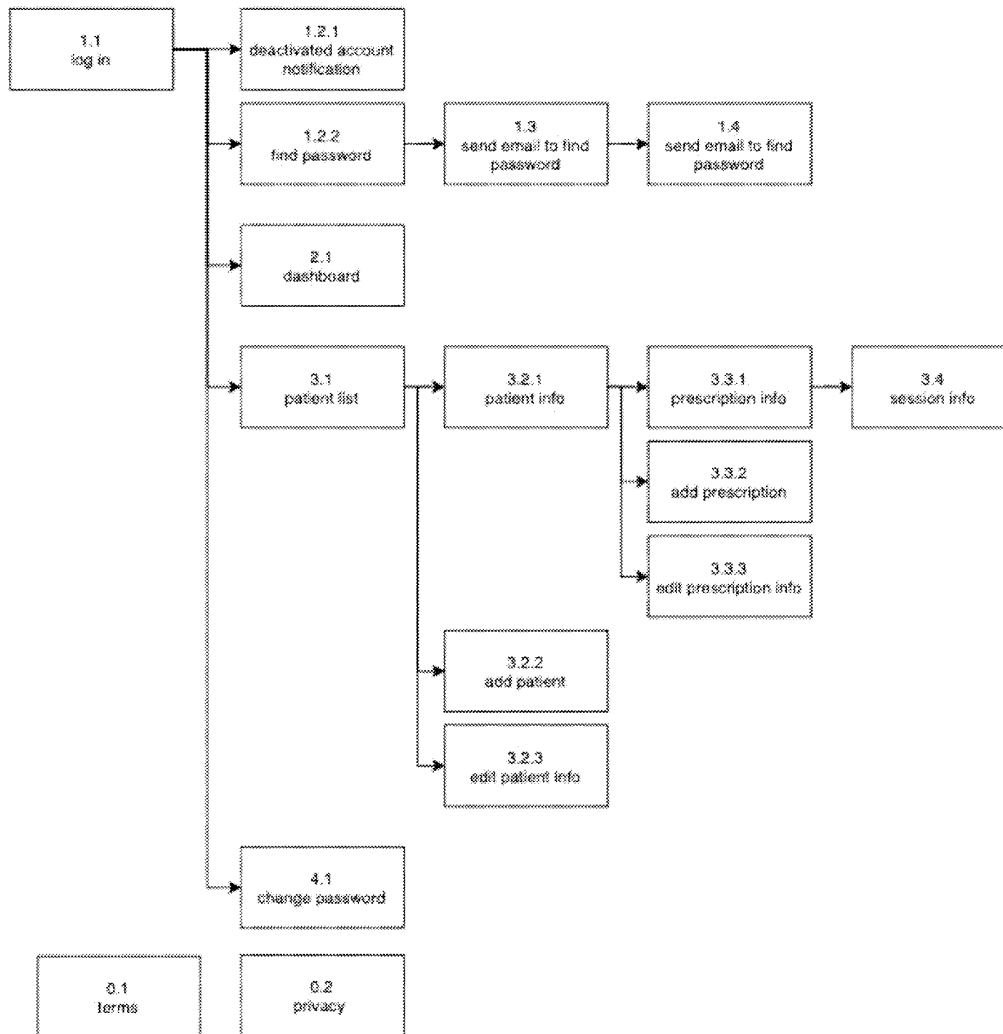
[Fig. 42]



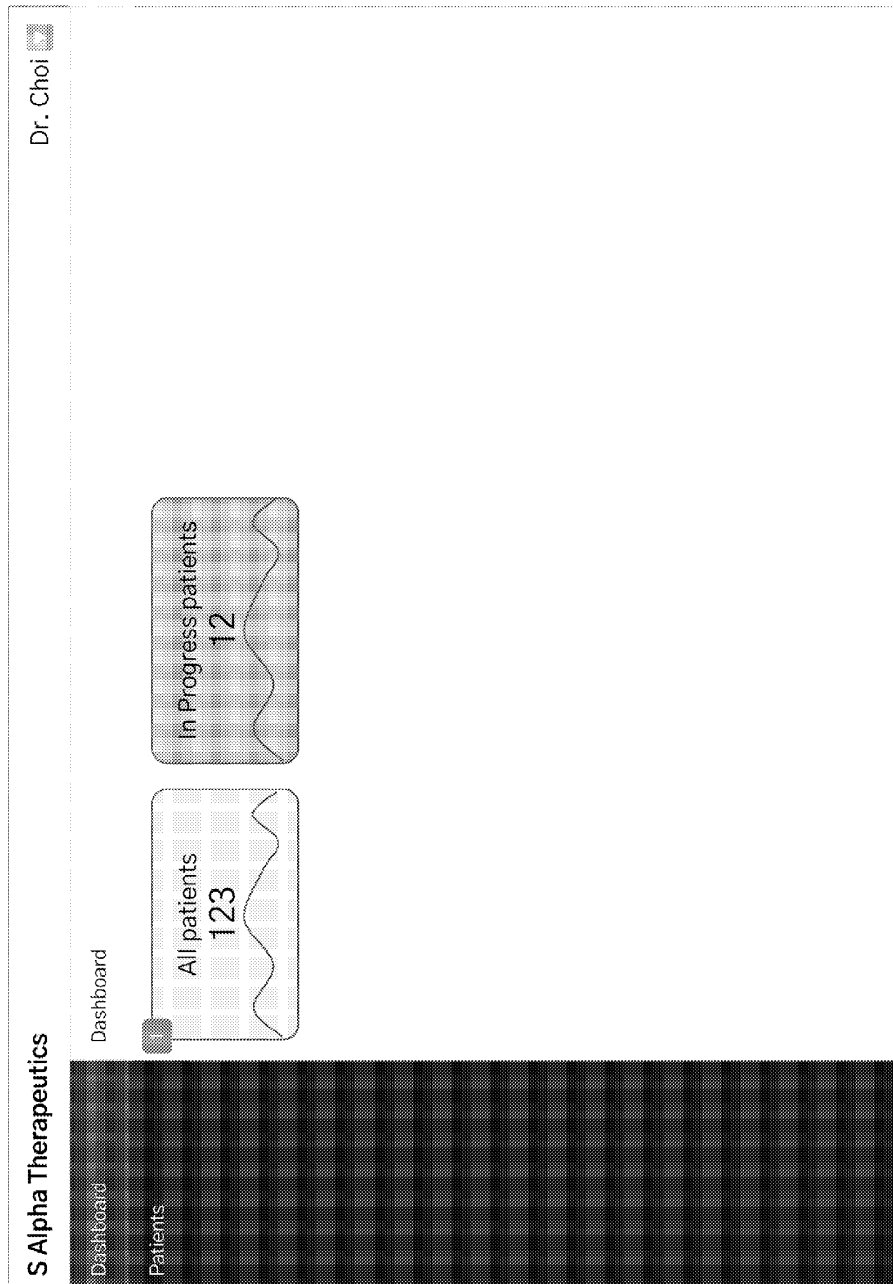
[Fig. 43]



[Fig. 44]



[Fig. 45a]



[Fig. 45b]

Dashboard

Patients

S Alpha Therapeutics

Dr. Choi

Patients

Search by ID, Name, Email, Memo

NEW Patient

ID	Name	Date of birth	Guardian Email	Memo
13252	Pororo	2016/12/31	pororo@gmail.com	Memo
11242	Crong	2016/05/01	crong@gmail.com	-
19734	Eddy	2015/11/31	eddy@gmail.com	Memo
31321	Patty	2014/01/23	patty@gmail.com	-
12315	Loopy	2016/04/31	roopy@gmail.com	-

1

2

3

4

5

[Fig. 45c]

Dashboard

Patients

Dr. Choi

Patients / Pororo

1

2

3

4

5

Pororo #13252

Guardian

010-1234-5678

[Send Patient Info.]

Patient Info

2017.08.22

This box is for Memo

Prescriptions

P-ID	Type	Start Date	Duration	Progress
1234	12 weeks (Myopia)	2020-04-14 00:00:00	2020-04-14 ~ 2020-07-06	Not started Scheduled Actual 0/84 days 0/84 days
1223	12 weeks (Myopia)	2019-12-17 00:00:00	2019-12-27 ~ 2020-03-19	In Progress Scheduled Actual 23/84 days 20/84 days
839	12 weeks (Myopia)	2019-10-01 00:00:00	2019-10-01 ~ 2019-12-23	Completed Scheduled Actual 84/84 days 20/84 days

6

7

8

9

[Fig. 45d]

S Alpha Therapeutics

Dashboard

Patients

Patients / Add patient

Dr. Choi

Guardian's email is required.

Success
Added patient

Patient info

Patient Name

Date of birth

Memo

Guardian

Email

Phone

When adding a patient, a patient ID will be created and a patient registration email and text message will be sent. Patients can be treated by logging in with the patient ID and password in email and text message.

Cancel

Add patient

[Fig. 45e]

S Alpha Therapeutics

Dashboard

Patients

Patients / Edit patient info

Dr. Choi

Patient info

Patient ID

23623

Patient Name

Pororo

Date of birth

2017.08.22

Memo

add memo

Guardian

Email

qwe@eye.com

Phone

+82010-1234-5678

Password

Reset password

Delete

Cancel

Save

S Alpha Therapeutics

Dashboard

Patients / Pororo / Prescription

Dr. Choi

Pororo #13252

Prescription info.

Session not started

Session not attended

Session partially attended

Session fully attended

Learn how we show adherence.

Prescription Type

Duration

Progress

12 weeks

2020-04-14 ~ 2020-07-06

[In progress]
Scheduled 23/84 days
Actual 20/84 days

Sessions

Search by Day

Day	Status	Start Date	End Date	Duration	Details
Day 1	Fully Attended	2020-04-14 12:14:00	2020-04-14 12:34:56	20m 56s	Show
Day 2	Partially Attended	2020-04-15 12:34:00	-	02m 31s	Show
Day 3	Not Attended	-	-	-	Show
Day 4	Fully Attended	2020-04-17 12:34:00	2020-04-17 12:58:12	24m 11.5s	Show

[Fig. 45g]

Dr. Choi

Patients / Pororo / Add prescription

Pororo #13252

Prescription

Prescription Type

Start Date

When you add new prescription, patient can get an email and text message about prescription.

Select

12 weeks (Myopia)

...

...

...

Select

...

Cancel

Add

[Fig. 45h]

Dashboard

Patients

S Alpha Therapeutics

Dr. Choi

Patients / Prescriptions / Edit Prescription

Pororo #13252

Prescription

Prescription Type

Start Date

12 weeks

2020-04-14

2020-07-06

~

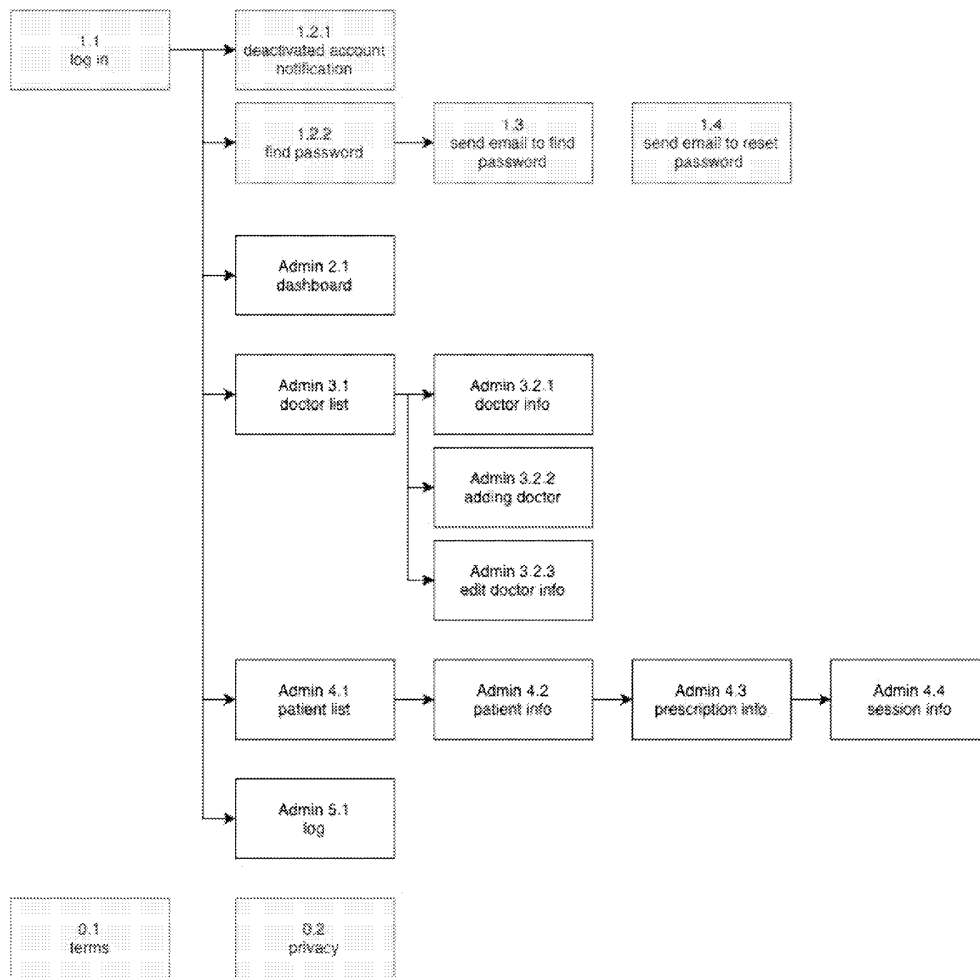
Prescription cannot be modified. You can re-issue prescription after finishing current one.

Finish

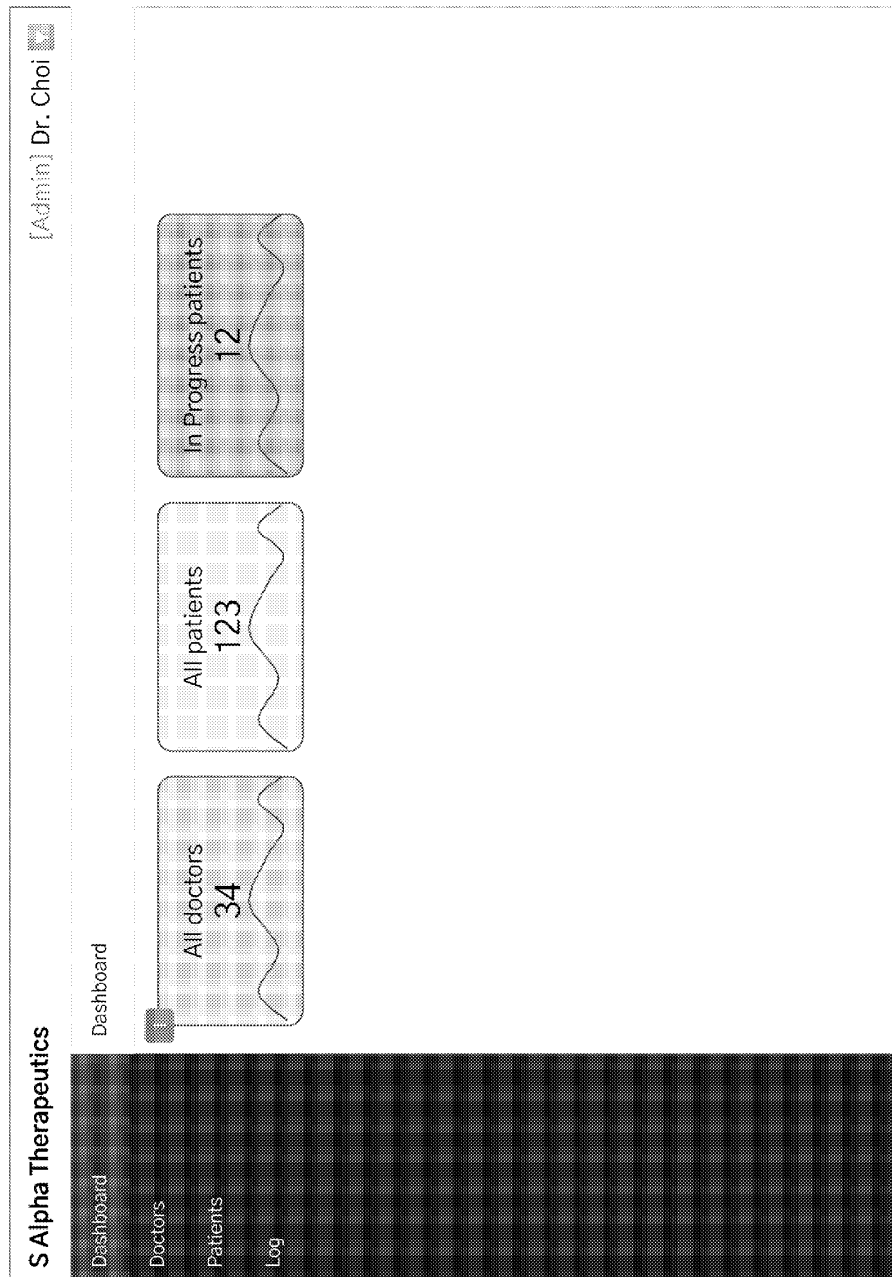
[Fig. 45i]



[Fig. 46]



[Fig. 47a]



[Fig. 47b]

S Alpha Therapeutics

Dashboard

Doctors

Patients

Log

Doctors

Search by ID, Name, Email

1

2

new doctor

Admin

Dr. Choi

ID	Name	Email	Patients
5	Steve	jun@eye.com	12
4	Andy	asd@eye.com	34
3	Eddy	zxc@eye.com	56
2	Petty	rty@eye.com	78
1	Loopy	fgh@eye.com	9

1

2

3

4

5

[Fig. 47c]

S Alpha Therapeutics

Doctors / Steve

Steve #5 Disabled

lundberg.com
[Send Doctor Info.]

Patients

Search by ID, Name

ID	Name	Date of birth
13252	***	****/**/****
11242	***	****/**/****
19734	***	****/**/****
31321	***	****/**/****
12315	***	****/**/****

Dashboard
Doctors
Patients
Log

[Admin] Dr. Choi

[Fig. 47d]

S Alpha Therapeutics

Dashboard

Doctors

Patients

Log

Doctors / Add new doctor

[Admin] Dr. Choi

Email is required.

Add doctor

Name

Email

When adding a doctor, a doctor registration email will be sent.
Doctor can login admin website by email and password in a registration email.

Cancel

Add doctor

[Fig. 47e]

S Alpha Therapeutics

Dashboard

Doctors

Patients

Log

Doctors / Pororo

Deactivate doctor

Are you sure you want to deactivate doctor?
When account is deactivated, doctor can't
login and their patients can't play new
sessions. [Deactivate]

Steve

qwe@eye.com

Reset password

Deactivate

Reactivate

Cancel

[Admin] Dr. Choi

[Fig. 47f]

S Alpha Therapeutics

[Dashboard](#)
[Doctors](#)
[Patients](#)
[Log](#)

[Admin] Dr. Choi

Patients

Search by doctor's name, patient ID

Doctor name	Patient ID	Patient Name	Patient Date of birth
Steve	13252	***	****/**/**
Steve	11242	***	****/**/**
Steve	19734	***	****/**/**
Andy	31321	***	****/**/**
Andy	12315	***	****/**/**

1

2

3

4

5

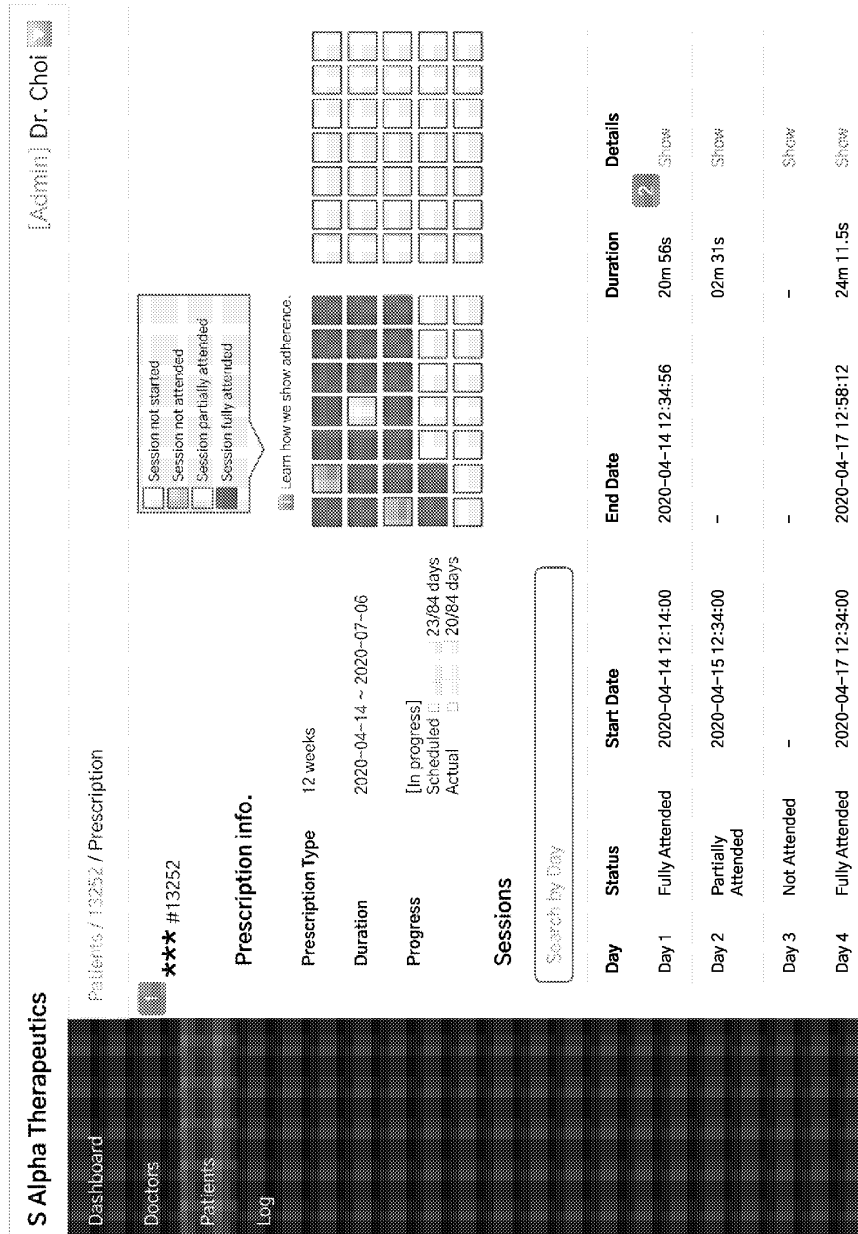
6

7

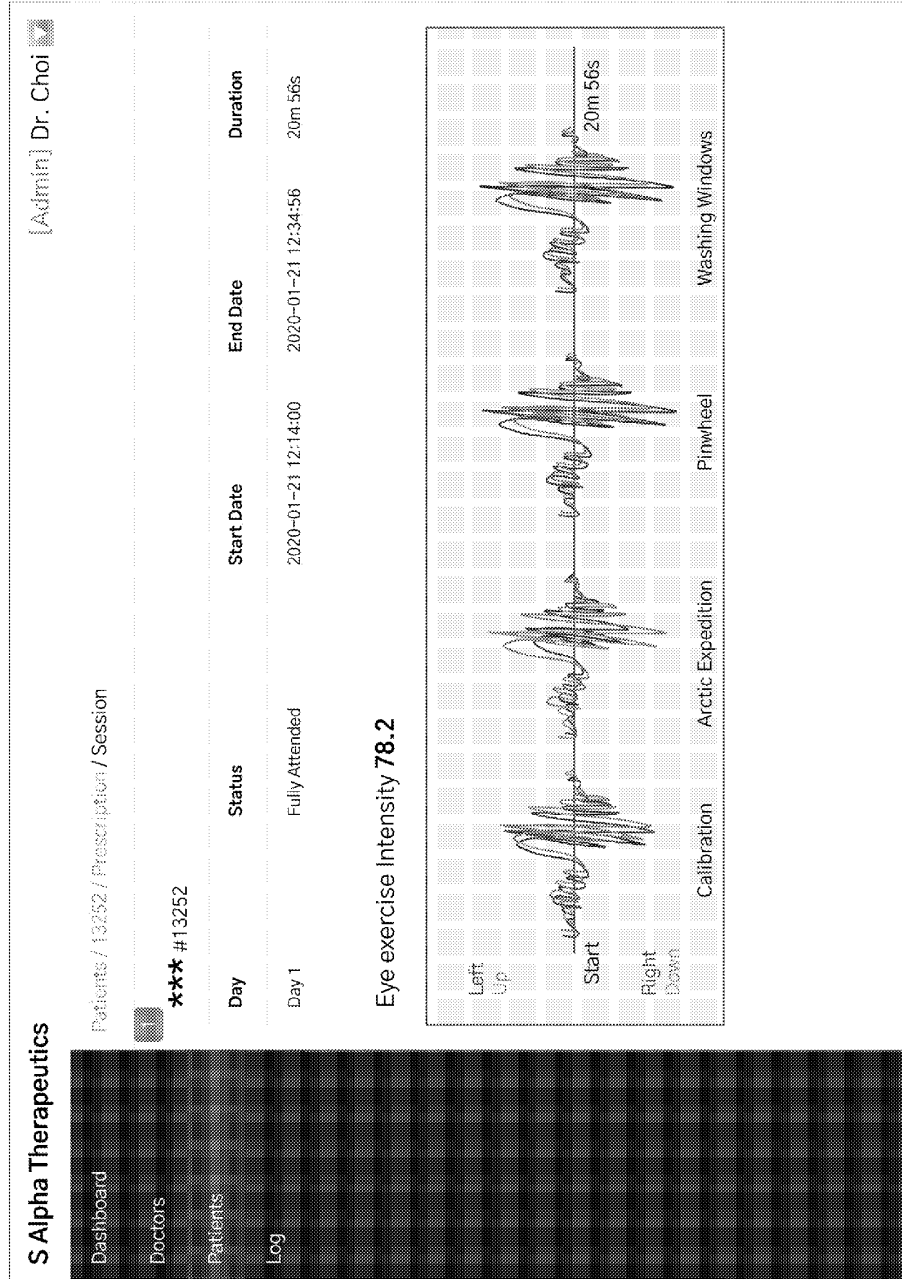
[Fig. 47g]



[Fig. 47h]



[Fig. 47i]



[Fig. 48]

Doctors	Administrators
Login	Login
Reset password (click reset button of the email)	Reset password (click reset button of the email)
Check dashboard	Check dashboard
Check patient list	Check patient list (De-identification)
Check a particular patient	Check a particular patient (De-identification)
Re-send email/SMS of patient info	–
Add patient	–
Edit patient info	–
Reset patient's password	–
Delete patient	–
Add prescription	–
Check patient's prescription info	Check patient's prescription info (De-identification)
Forcibly terminate patient's prescription	–
Check patient's session	Check patient's session (De-identification)
–	Check doctor list
–	Check a particular doctor
–	Re-send email of doctor info
–	Add doctor
–	Edit doctor info
–	Deactivate doctor
–	Re-activate doctor