RAONSQUARE | playdodo

The kids experience center 'Playdodo' provides new experiences to children through tactile experience contents based on multiple intelligences and behavior types.
An interactive media that analyzes 'experience data' to identify children's 'strong intelligence' It is a base convergence kids experience center.
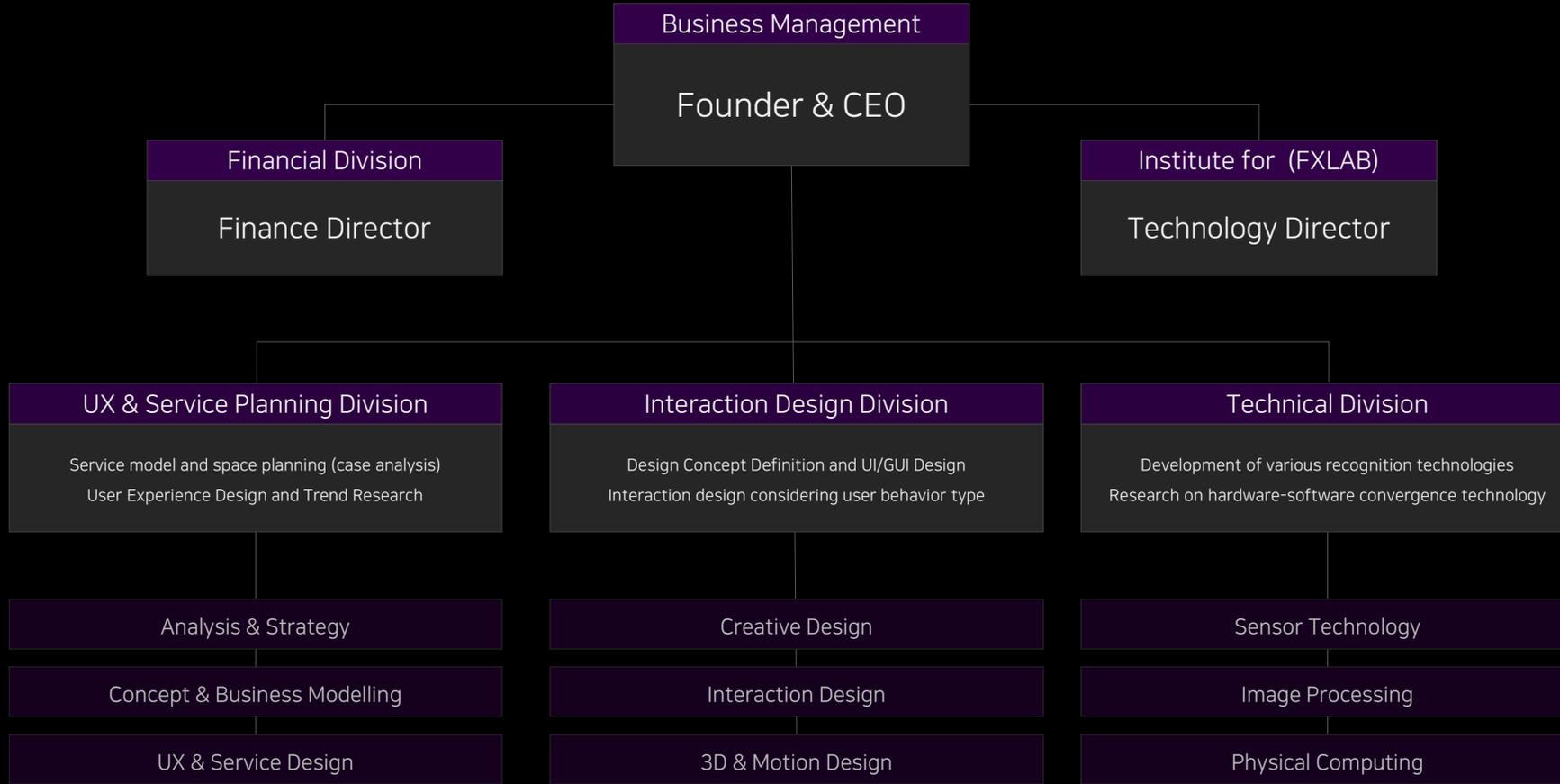(Patent Registration No. 10-1758198)

RAONSQUARE is a UX Design Company that provides creative-based

'**differentiated user experience design and consulting services'** for various devices and environments.

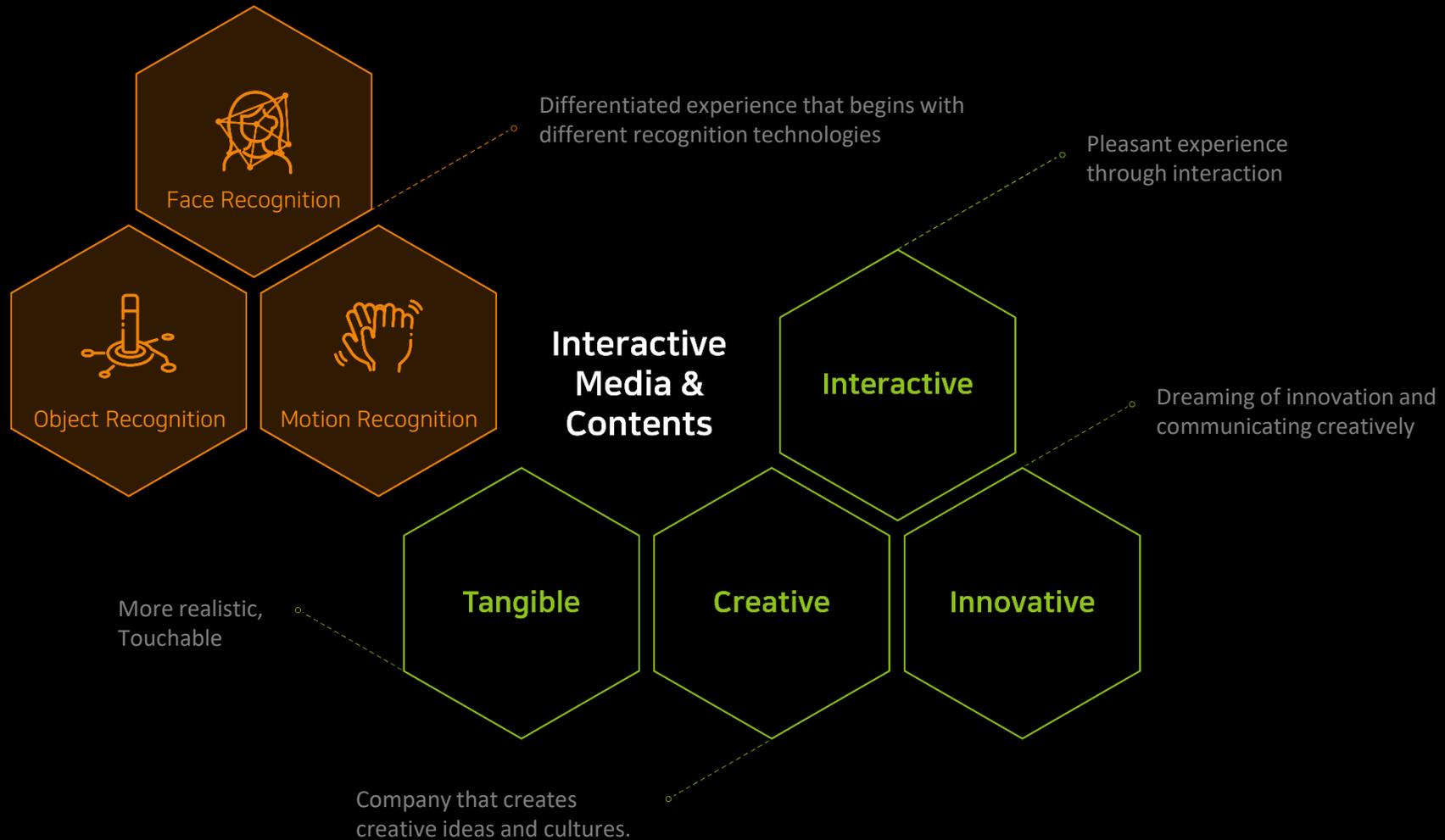| Company Name /CEO	RAONSQUARE CO., LTD. (www.raonsquare.com) / Taeil, Kim
Date of Establishment / Location	August 26, 2010 / Unit 1607, Saeng-gag Gongjang Desiang Flex, 49, Achasan-ro 17-gil, Seongdong-gu, Seoul, Korea
Business Area	Interactive Contents & Platform / Service Design / Tangible Media / UX Product Design / Digital Space Design / Interaction Design & Engineering
Major History / Award Performance	- SEP 2013 FX Lab(Future Experience Laboratory) certification from the KOITA - JUN 2014 KIBO Authentication Venture Business - JAN 2015 KIDP (Korea Institute of Design Promotion) Industrial Design Firm (Multi-Media field) - MAY 2015 SMBA (Small and Medium Business Administration) Start-ups into Stars Program (50 Companies) - SEP 2015 SMBA 'Technology Development for Startups Growth' Business Program - AUG 2015 Digital Contents R&D Business with Ministry of Future Science and Technology & IITP - APR 2016 Musical 'Cat Zorba' Performance Collaboration Business (@National Museum of Korea) - JUL 2016 Character Licensing Fair, Seoul International Character Animation Festival Participation - SEP 2016 11st Hankook Ilbo Digital Innovation New Industry 'Cultural Technology Part' Grand Award - December 2016: "PLAYDODO" by Good Design GD of the Korea Institute of Design Promotion - February 2017: 'Smart Cube & Table, Face AR Sticker' won the HCI KIDS AWARD Grand Prize from the HCI Society of Korea - June 2017: Selecting 'Start-up Growth Technology Development Project' under the supervision of the Small and Medium Business Administration and carrying out the project (Pernal Color Diagnosis and Product Recommendation Service) - October 2017: The 3rd Hangul Creative Idea Contest (2017) won the "Multiple Sense Hangul Play" Encouragement Award in the IT sector.
Echnical Patents / Trademark Registration	1. [Technical patent registration status] - Patent registration 10-1533603 / 2015.06.29 / recognition method and recognition device (patent evaluation A grade / PCT application by the Patent Office and the Korea Invention Promotion Association) - Patent registration 10-1635456 / 2016.06.27 / terminal and holder control method and system - Patent registration 10-1661989 / 2016.09.27 / Contents on the puppet show performance device that can be controlled simultaneously with dolls and backgrounds - Patent registration 10-1643968 / 2016.07.25 / Methods and systems for providing information on things using slot devices equipped with slots in which cards are inserted (applied in China) - Patent registration 10-1712052 / 2016.11.29 / Interactive content delivery system and method - Patent registration 10-1712052 / 2017.02.23 / Display method and system for displaying images including processing characters on display devices - Patent registration 10-1758198 / 2017.07.10 / Multi-Intelligence Inspection System and Method (PCT application) 2. [Intellectual Property Registration Status] - Registration of RAONSQUARE service table / 2014.08.06 / Interactive content and software development - ACTIVE VISION trademark registration / 2015.01.08 / downloadable electronic book service (content management and statistical analysis system) - Register PLAYDODO Service Table / 2016.07.07 / Provide children's experience center for educational purposes

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ORGANIZATION _ PROFESSIONAL TEAM

Members of '**RAONSQUARE**' have experience in developing UI/GUI in a wide variety of computing environments and offer a variety of digital experiences with top priority on **user experience**.

Business Management

Founder & CEO

Financial Division

Finance Director

Institute for (FXLAB)

Technology Director

UX & Service Planning Division	Interaction Design Division	Technical Division
Service model and space planning (case analysis) User Experience Design and Trend Research	Design Concept Definition and UI/GUI Design Interaction design considering user behavior type	Development of various recognition technologies Research on hardware-software convergence technology
Analysis & Strategy	Creative Design	Sensor Technology
Concept & Business Modelling	Interaction Design	Image Processing
UX & Service Design	3D & Motion Design	Physical Computing

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We have an **ability to combine hardware and software** with User behavior, and develop to various research.

Also, we can handle technology related to **awareness and manipulation**. **(10 Related patents)**

Face Recognition

Object Recognition

Motion Recognition

Differentiated experience that begins with different recognition technologies

Interactive Media & Contents

Interactive

Pleasant experience through interaction

Dreaming of innovation and communicating creatively

Tangible

Creative

Innovative

More realistic, Touchable

Company that creates creative ideas and cultures.

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1

Sensing Technology

2

Active Vision CMS

3

Physical Computing

1. Retaining object recognition technology that can be touched and physically manipulated

Based on various sensing technologies such as face recognition, motion recognition, and object recognition, the company has a competitive edge that is differentiated from other contents by combining 'physical motion and object recognition technologies that can be touched or physically manipulated'.

2. Has proven content management and statistical analysis solutions

Our unique CMS solution (**ACTIVE VISION** - Content Management and Statistic Solution) that has proven reliable through multiple customer sites enables efficient management of the features and services customers want.

3. Ability to develop convergence services between S/W and H/W.

Our expertise in hardware development experience and knowledge enables us to create new, non-existing H/W as needed, which is also a strong competitive advantage for us in related markets where the convergence of S/W and H/W is critical.

We have an **ability to combine hardware and software** with User behavior, and develop to various research.

Also, we can handle technology related to **awareness and manipulation**. **(10 Related patents)**

'RAONSQUARE' has **a various business area for each of the industrial fields**
based on its own interactive media platform **'ACTIVE VISION'**.

On-line and off-line provide new strategies and differentiated execution capabilities that deviate from traditional notions.

PLAYDODO
Convergence Experience Center

Multi-Intelligence and Behavioral-Based Convergence Children's Experience Center
Development of Kids Play Space and Indoor Sports Space with Various Sensor Technology

FUTURE RETAIL
Futuristic Retail Store

Producing Installation media at Indoor/Outdoor facilities like store and multiplex shopping mall, and planning and designing to fit the location and situation.

EVENT / PROMOTION
Creative & Innovative

Experience promotion promotional events to present the creative know-how for marketing the brand image change through interactive event design & development.

EXHIBITION / EXPERIENCE CENTER
Digital Space UX

Experience exhibition planning for the user to experience space for all UX digital media.

Future Experience LAB
R&D / Product Planning

The Project proceeding on the basis of applied research and commercialization outcomes about the various technologies.
Development of **face recognition, motion recognition, and object recognition** technology

INTERACTIVE AD PLATFORM
Digital Signage Platform

'raonsquare' offer an effective advertising and reliable operation management & We have systematically analyzed and managing advertisement effect based on our own interactive media platform 'ACTIVE VISION'.

ACTIVE VISION®
Product by RAONSQUARE

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7

Our services are running on the **'Tangible experience contents'**, based on the **'Multiple Intelligences'** and 'Patterns of behavior'.

It could be providing a 'new experience' for children, and by analyzing a 'experience data'.

'**Convergence Playground**' is identify 'strengths intelligence' of children. **(Patent registration)**

+

+
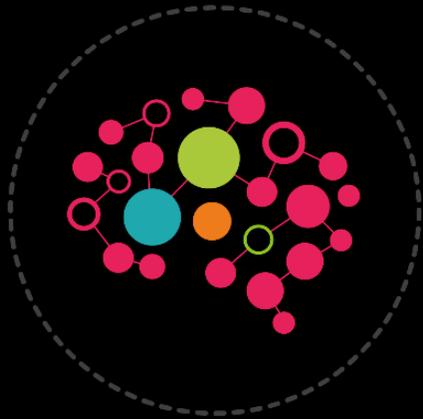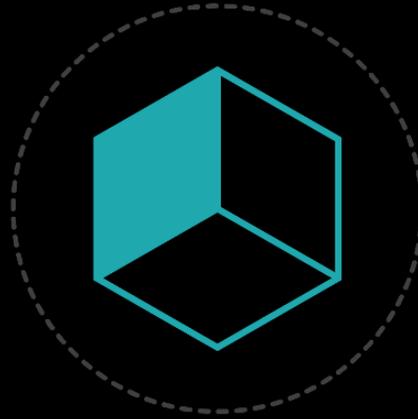
Service

Multiple Intelligence and

Big Data Convergence Service

Children's multiple intelligences analyzed by experience data. This data can be check by band measurement. (time, heart rate, activity level, etc.)

Space

Playground Safety and diversity

We are always considering the space design rules, 'for children Design Guide'
Electromagnetic compliance with the safety distance, interpolation range complies

Contents

'Tangible Media' based on

interactive content

We have a lot of experience with specific action type, touch type content development. All contents are based on multiple intelligences and children's behaviors.

Target Users	Sales Target	Product Category	Sales Method
Children aged 5 to 10, and their parents (B2C)	Kids industry related companies (B2B)	Full package, license, individual item sales scheme	CLOUD-based Operation Platform and Content Management

Space Planning

Multiple intelligence analysis
3.EX Report

Personalized
4.Goods

D

5.Exit

C

2.EX Space

B

1.Entrance

A
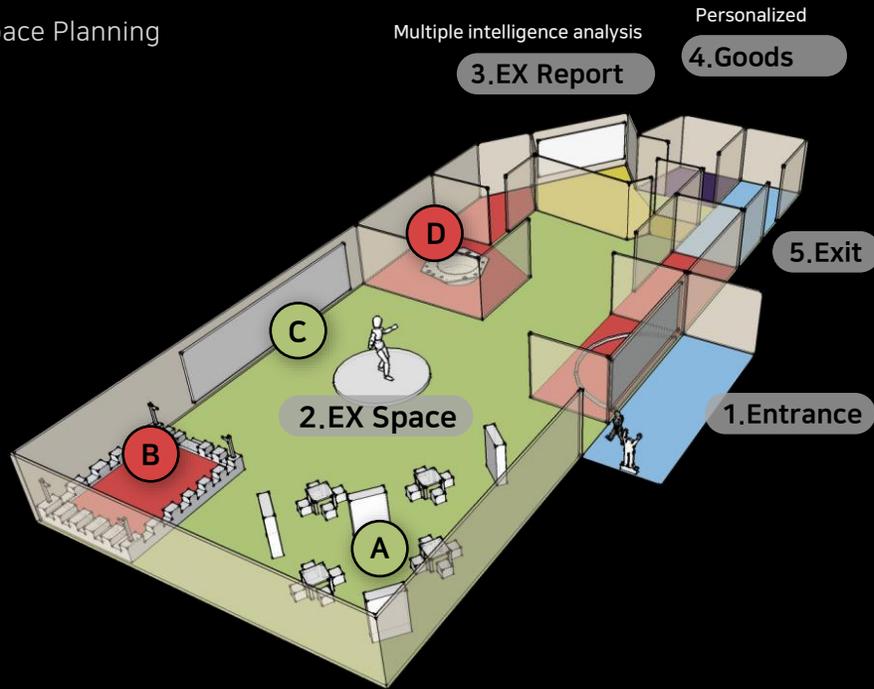
A Kiosk/Table Type
Each experiences are able to arranged freely.
Easy and fast theme change and contents update available.

B Booth Type
Specific and independent space needed
for using objects like sand, water and etc.

C Outside Type
A big space is needed for kids activity.
Touchable objects are main materials.

D Space Type
Materials which have big influence from light or require high concentration need separated space

Kids experience center with digital interaction analyzing kids multiple intelligence based on their experience data

Kids — Playground with various fun experience facility based on behavior pattern.

Parents — Helpful place to their kids providing contents for intelligence development, not just like normal kids cafe amusement.

Manager — Culture place with high revisit rate and efficient CMS with convertible contents & quarterly updates.

1.Entrance **5.Exit**
Collect experience data
Experience data collection using DODO Band 's sensor matched up with registered participant ID. / Intelligence development is analyzed by checking duration, active mass, heart rate and other related information per each contents.
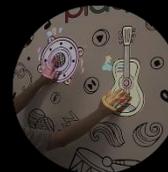
2.Space A B C D
Motion and tactile specialized content
Experience Contents which specialize in motion and touch sensation based on multiple intelligence and kids behavior pattern.

3.EX Report
Analytical system
Based on multiple intelligence test, analysis system provides experience result and kids' specialization.

PLAYDODO | EXPERIENCE CONTENTS

(Interactive Experience Item of multiple intelligence and behavior pattern)

Experience Content _ Daegu Creative Convergence Education Institute 'AI Education Center'

- A cutting-edge AI and digital education space offering AI-based, convergent, and customized programs for elementary, middle, and high school students.
- Developed content for the AI Experience Center: 'AI Block Coding / Music Play / AI Future City Creation / Digital Parade'

AI Future City Creation: When users place blocks they create, sensors recognize the color and position of the blocks, playing different motion effects for each color.
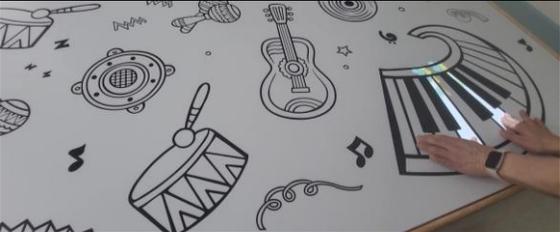
Music Playing Table: Connected to a beam projector in real time, each touch of an instrument displays instrument sounds and onomatopoeia, and the color fills the space with fun motions.

Digital Parade: Interactive experience content that allows users to read QR codes and create and send their own unique characters on their mobile devices.

https://vimeo.com/1134547700

Experience Content _ Jeonnam Creative Convergence Education Center 'AI Future City Creation' Block Table

- Using actual Lego blocks, it helps develop fine motor skills and spatial intelligence through the process of directly assembling and completing blocks rather than simply touching them. (Digi-log + Future + Education)
- The block recognition table provides various sounds and motion effects through the combination of slot positions and block colors to enhance the three-dimensional experience and satisfaction.
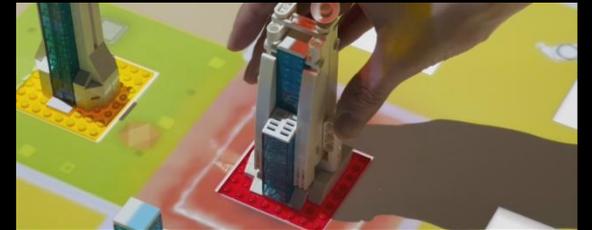
When the user places the block he created in the designated space (slot), the sensor recognizes the color and position of the block and plays different motion effects for each color..
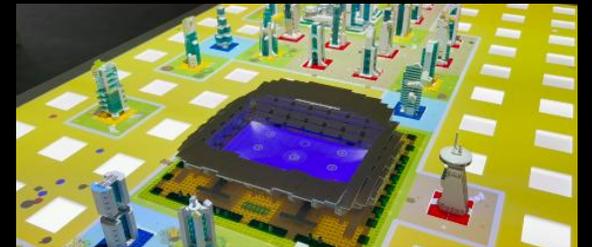
Includes a drone stadium, 2 landmark buildings, and 30 other buildings pre-made by a Lego expert (Brick Artist).

When a certain amount of drone blocks are accumulated, a 'drone show event' is shown in the 'drone stadium' in the center.

https://vimeo.com/901721363

Experience Content _ ANANTI CHORD 'KIDS Play Zone' Interactive Platform

- The interaction kids experience space installed at Gapyeong Ananti Hotel provides various interaction experience platforms and contents based on motion recognition and touch sensors (7 types in total)
- Applying motion recognition sensors and laser multi-touch sensors based on large media walls 12m wide x 3m long + 5m wide and 3m long, respectively.

Sketch POP_ Painting and Touch Interaction Experience

Music Playing _ playing a musical instrument with a touch

Space Monster _ Multi-touch with multiple people

https://vimeo.com/418808784

Experience Content _ KIA MOTORS SHOW 'SKETCH WORLD'

- PBV experience content installed at the KIA booth held at the 2022 Busan International Motor Show under the theme of 'NEXT MOBILECTION, A CELEBLATION' (202.07.15-07.24, 10/ Busan BEXCO Exhibition Hall 1).
- Interactive experience content where you can learn about Kia Motors PBV at KIOSK, create and color your own PBV design, and register it on the media wall to experience various motion effects including sound.

Touch Kiosk _ After selecting the desired PBV vehicle according to the purpose, print the design.

Coloring & Scan _ After coloring the printed design, scan it and send it.

Interactive Wall _ My own PBV vehicle appears and moves with motion.

🔗 https://vimeo.com/742197869

- Content that can emotionally experience the story of the Little Prince through motion effects and narration using a cup that recognizes markers and a cup that can hear sounds. **(Patent pending)**
- You can hear the corresponding narration with the motion effect by placing the cup on the marked position. (marker recognition and sound playback / multiple people can experience it at the same time)
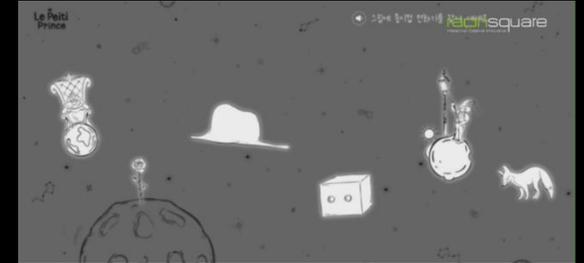
In standby mode, it is produced in the form of a soft silhouette with BGM.

Voice actor narration is executed when the cup is placed on the marked position.

The location where the experience is completed is expressed in color along with motion effects.

https://vimeo.com/510032902

Experience Content _ PLAYDODO 'ICE WORLD' Interactive Game

- If the flashlight is illuminated towards the screen from the designated position, a circular light corresponding to the color of the flashlight will be displayed.
- If you find a heart that matches your color and press the flashlight button, the submarine will rise one notch to the surface.

https://vimeo.com/460048687

The game method guide and the flashlight match will be carried out when standing in the designated location.

Find a heart that matches your color and press the flashlight button to move the submarine up one level (if wrong, step down).

Finally, when you meet the animal family, you complete the mission with the motion effect.

Experience Content _ PLAYDODO 'DESSERT GARDEN' Interactive Game

- An interactive game that uses a flashlight using a gyro sensor to obtain the dessert the character is holding.
- If you find a head friend holding a dessert, aim the light and press the flashlight button to get a score.

Dessert Garden
디저트를 들고 있는 두두친구를 발견했을 경우,
빛을 조준하여 손전등의 버튼을 누르면 점수 획득

https://vimeo.com/460047755

The game method guide and the flashlight match will be carried out when standing in the designated location.

If you find a head friend holding a dessert, aim the light and press the flashlight button to earn points. (other items are deducted)

A randomized balloon will produce bonus desserts, and after a set period of time the game will be played, their scores will be displayed.

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Experience Content _ PLAYDODO 'MONSTER TOUCH GAME'

- An interactive touch game using a large touch sensor, in which the left and right teams with more points than the other team wins.
- A game that saves a monster by touching a meteorite that appears randomly for a given period of time when the timer starts at the start of the game.

Monster Touch Game
파란색 번개운석은 +50,
빨간색 번개운석은 –50과 함께 생명 1이 차감됨

https://vimeo.com/460049105

Touch a randomized meteorite to get a score.

+50 for blue lightning meteorites and –50 for red lightning meteorites, plus 1 for life.

Game results will be displayed after a set period of time.

- Coloring and scanning prepared monsters & wood designs will bring about motion effects and media wall experience.
- Touch a registered monster to fly with motion effect. (three themes: forest/sea/space background)

Monster Sketch POP
숲속배경/바다배경/우주배경의 3가지 테마로 구성
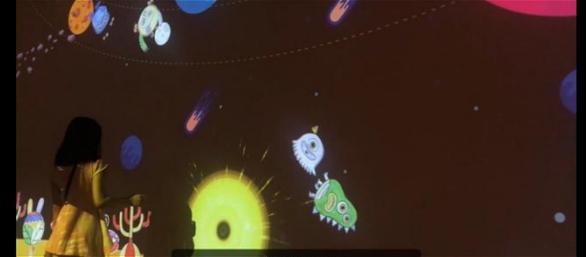
Touch a registered monster and fly freely with motion effect.

Color and scan monster and tree designs and send them to the media wall.

Composed of three themes: forest/sea/space background.

https://vimeo.com/460049816

Experience Content _ PLAYDODO 'RHYTHMIC MOTION GAME'

- It's a motion recognition-based rhythm game where you move your body to the music presented and score points.
- A motion recognition game where you select the music you want and move it to the position of the falling ball and touch it.

Rhythmic Motion Game
원하는 음악을 선택한 후 떨어지는 공의 위치에 맞게
이동하여 터치하는 동작인식 게임

3Choose from three genres of music to choose from.

Scoring by moving the body to the music presented.

Success/failure/combo mode, with levels divided according to earned scores to display results

- A boxing game developed based on motion recognition technology among the Playdodo sports themes, consisting of a single-player game and a double-player game.
- When a person is recognized, the game starts and scores a score by hitting a monster that appears randomly for a given period of time.

Boxing Game
체험자가 인식되면 게임이 시작되며 주어진 시간동안
랜덤하게 나타나는 몬스터를 때려 점수를 획득하는 방식

An action game that punches a randomly appearing monster.

Categorized as a single and a double-player games.

Show winners and losers with scores at the end of the game.

https://vimeo.com/460053218

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Experience Content _ Sticker POP (Face sticker AR)

- Face sensor camera catches features and change face to cute character using AR technology.
- This character can be printed to stickers, also can be added to a unique badge.

Face Sticker: Select the desired character and take AR photos

Photographs taken are printed on stickers.

Badge making

https://vimeo.com/178564408

Experience Content _ Paper Toy

- Children can select their unique 3D character and by using scissor and glue, make a complete paper toy.
- Each toys have a unique ID so the camera sensor recognizes ID and brings it to a virtual reality. **(Patent registration)**

Completes your own paper toy by combining facial expressions, costumes, and tail shapes of the characters you want.
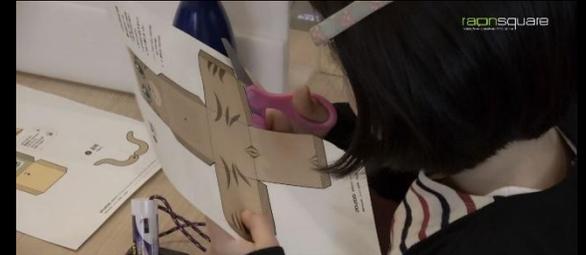
Print the completed character with a printer and make it paper-toy with scissors and glue.

When you put the finished paper toy on the table, a cat appears in the virtual world.

https://vimeo.com/178564407

Experience Content _ Paper Toy with CUBE

- Experience using CUBE to combine each element of a character into the desired form, print it, and register it in the media wall.
- Play content for each cube using RFID-based object recognition technology.
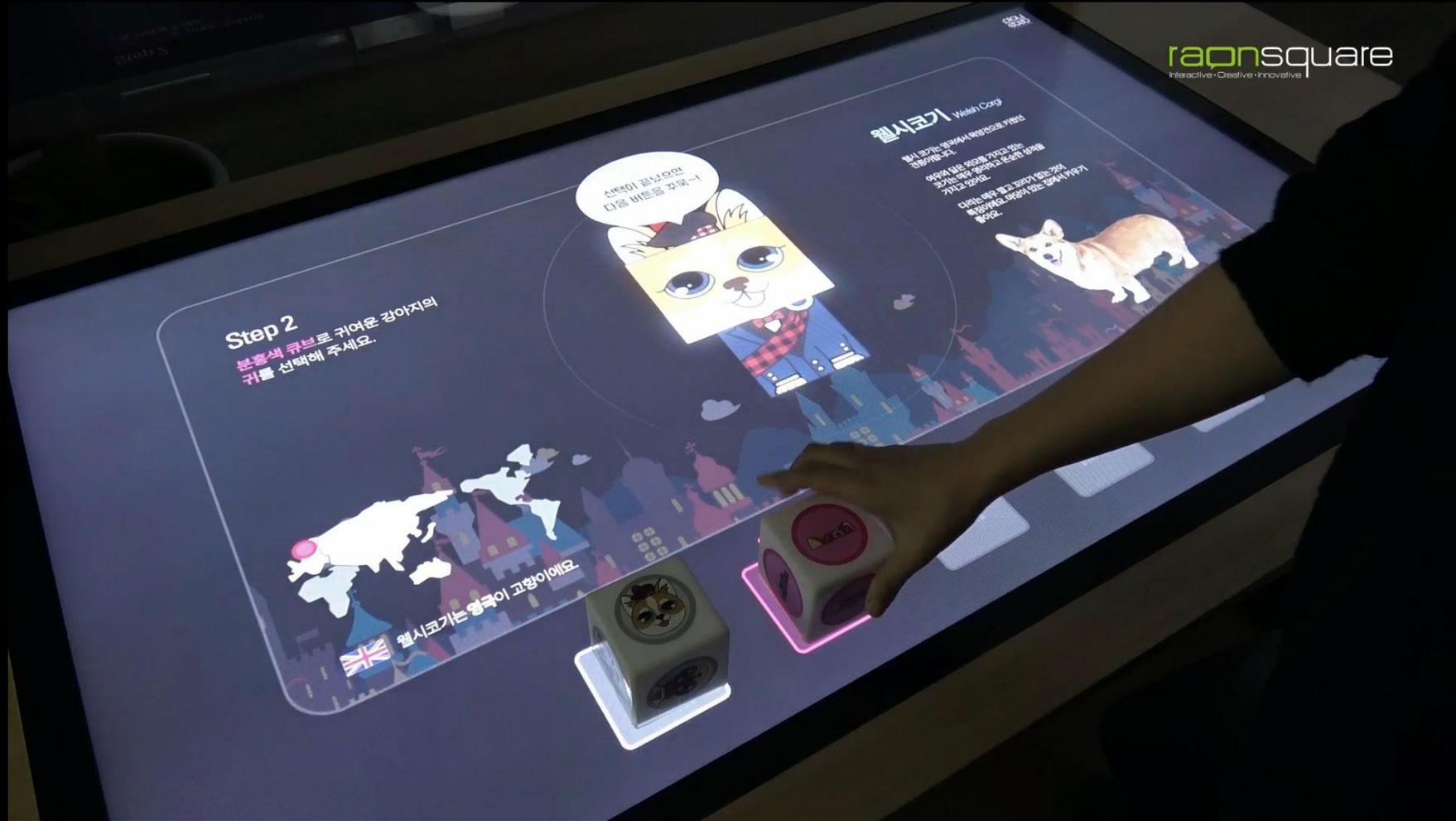
Combine the facial expressions, costumes, and tail shapes of the desired characters using an RFID cube, and complete your own paper toy

Print the completed character with a printer and make it paper-toy with scissors and glue.

When you put the finished paper toy on the table, a cat appears in the virtual world.

https://vimeo.com/241458576

Experience Content _ Interactive AR Media

- A huge media wall interacts to children's moving and delivers augmented reality(AR) experiences.
- Children can feel like being a tree, touching fishes and playing with characters.

AR experience contents that recognize and respond to the user's behavior.

Provide a variety of design themes through customization.

Various emotional and seasonal contents based on motion recognition are provided.

https://vimeo.com/178564406

Experience Content _ Interactive AR Media

- A huge media wall interacts to children's moving and delivers augmented reality(AR) experiences.
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Provide a variety of design themes through customization.

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https://vimeo.com/224031965

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Experience Content _ ANANTI CHORD 'KIDS Play Zone' Interactive Platform

- The interaction kids experience space installed at Gapyeong Ananti Hotel provides various interaction experience platforms and contents based on motion recognition and touch sensors (7 types in total)
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Sketch POP_ Painting and Touch Interaction Experience

Music Playing _ playing a musical instrument with a touch

Space Monster _ Multi-touch with multiple people

https://vimeo.com/418808784

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Experience Content _ KIA MOTORS SHOW 'SKETCH WORLD'

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Touch Kiosk _ After selecting the desired PBV vehicle according to the purpose, print the design.

Coloring & Scan _ After coloring the printed design, scan it and send it.

Interactive Wall _ My own PBV vehicle appears and moves with motion.

https://vimeo.com/742197869

Experience Content _ NATIONAL JEJU MUSEUM 'Smart Cup & Paper Toy'

- Smart Cup: An interactive media wall that uses RFID-based object recognition smart cups to learn about Jeju's water-related customs in a fun way. (Application of patent registration technology)
- Paper Toy: Create your own paper boat with the desired pattern and pattern and register it on the media wall with a wish message.

A touch wall that uses a touch sensor to check Jeju sea and sand information.
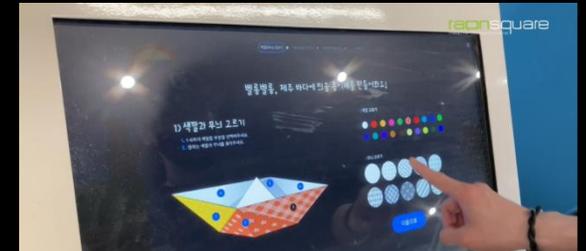
After making your own paper boat by selecting the desired pattern and color, register it on the Media Wall through the QR code. (Including wish post)

Photo kiosk where you select the desired photo skin and take a commemorative photo. (Provides mobile download function through QR code)

https://vimeo.com/730255188

- Three types of interactive experiences installed in the 'CHEONGNAMDAE' History Education Center, where you can learn about the activities and history of the Provisional Government of the Republic of Korea.
- Digital Sketch Pop / Keyword Touch Wall / Interactive Game

Digital Sketch Pop : Interactive content that allows users to scan and send designs they have painted and experience them with touch motion effects.

Keyword Touch Wall : Experience content that uses a beam projector and touch sensor to meet keywords and sayings of eight heads of the Provisional Government.

Interactive Game : A game-style experiential content in which you throw a ball directly into a touch sensor-based media wall to save an independence activist.

https://vimeo.com/701123299

Experience Content _ SEONBI WORLD Hangeul Village 'Hangeul Cube' (Smart Cube)

- Hangeul Cube and Smart Table installed in the 'Hangeul Village' in the 'Seonbi World' in Yeongju, Gyeongsangbuk-do.
- Educational content to understand the principles of Hangeul by solving problems in the Quiz method using Hangeul Cube.

01. Smart CUBE
한글자음(첫소리)3종+ 한글모음(가운데소리)2종
한글자음(끝소리)3종의 한글상자(RFID Tag 매립)

https://vimeo.com/701122244

It consists of 3 types of Hangul consonants (first sounds) + 2 types of Hangul vowels (middle sounds) + 3 types of Hangul consonants. (end sounds). (RFID Tag burial)

Check what you have learned through the Quiz game. (Gamification / Provide hints)

Scores are given differently according to the 'time required' and 'use of hints' for each problem, and the final results by grade (1st prize/2nd prize/3rd prize) are shown.

Experience Content _ SHINHAN BANK 'Smart Beam & Motion Game'

- Financial roadmap smart beam and personal information protection motion game installed at Shinhan Bank Myeongdong Financial Education Center. (financial information + trends + education)
- Interactive experience content that presents a financial roadmap through a interactive touch wall and learns the importance of personal information protection through a motion game based on motion recognition.
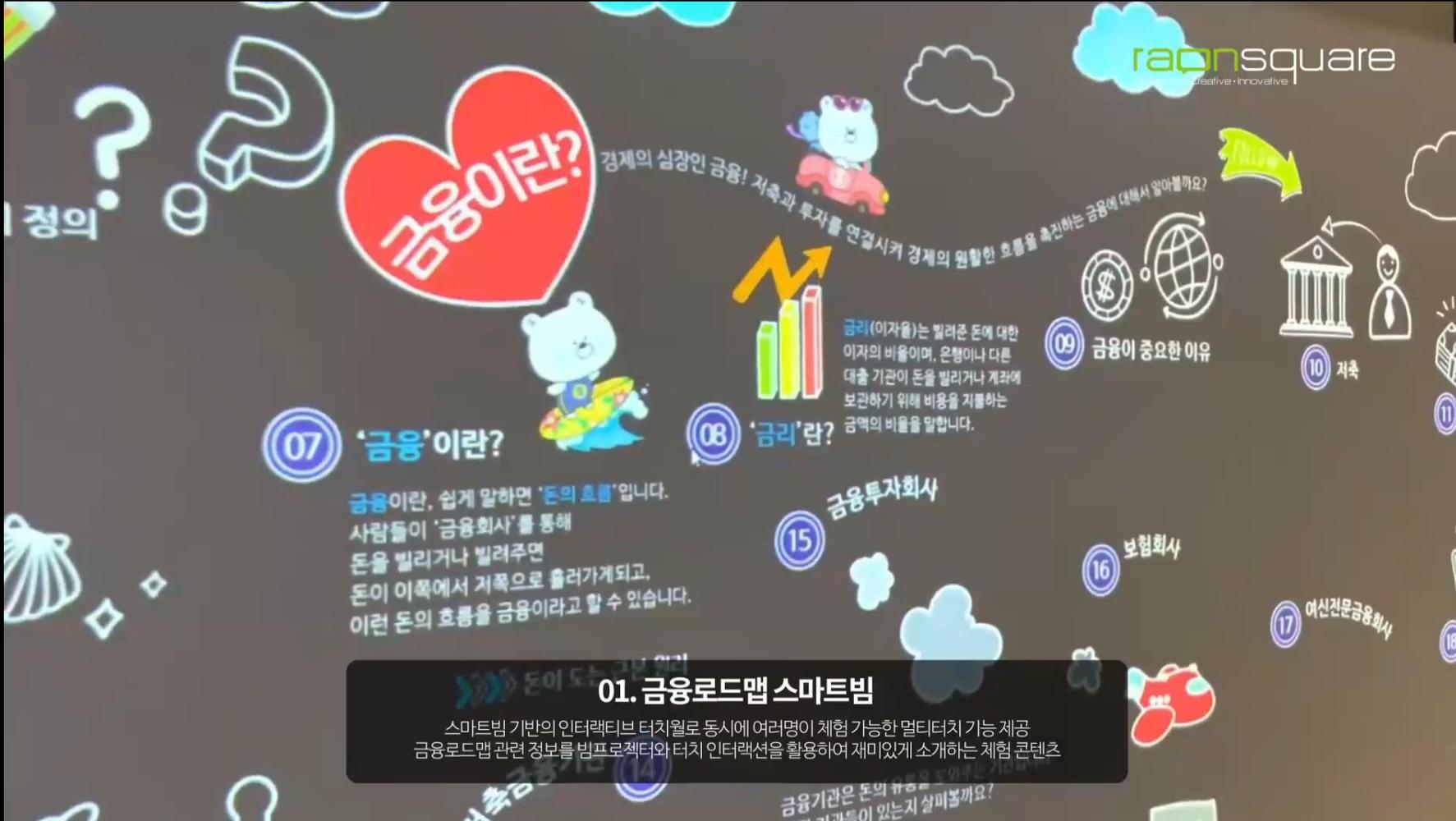
Introducing the financial roadmap using a beam projector and multi-touch interaction.

An interactive motion game based on motion recognition. (Acquisition of coins and quizzes)

Gamification content that explores keywords related to personal information protection in the form of a quiz game.

https://vimeo.com/701119820

- Experiential content that appears in the form of mapping when large prepared sponge blocks (50*50*50mm / approx. 15 pieces) are stacked according to the shape (10 types) presented on the media wall.
- When stacked in the same shape as the proposed block, a pre-designated graphic (ex. robot) appears with sound + motion.
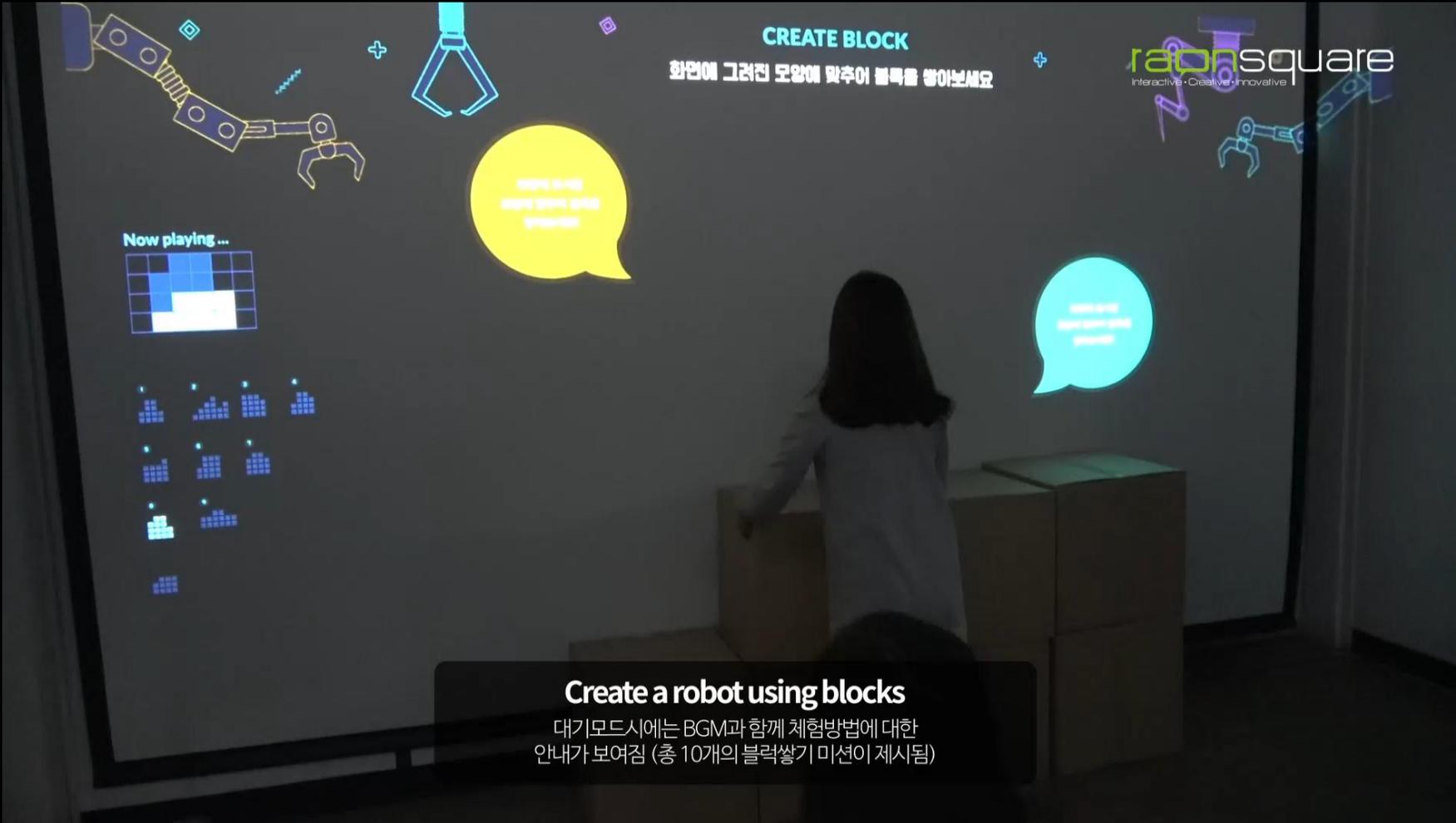
Interactive touch wall using beam projector and object recognition sensor.
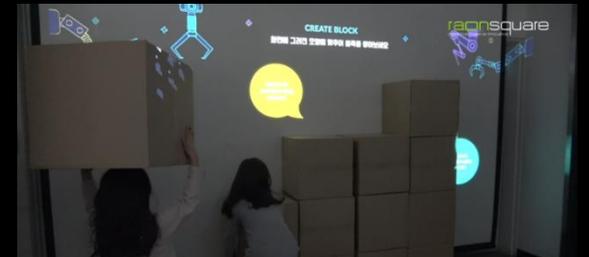
Complete the block by directly stacking it according to the proposed design.
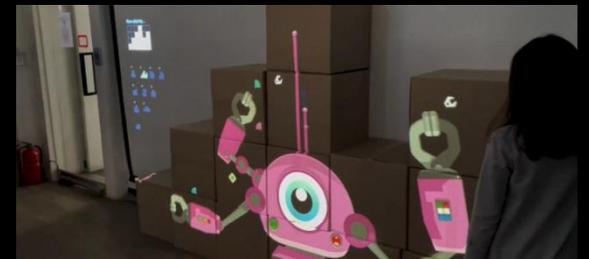
When the block stacking is completed, the matching character appears with narration.

https://vimeo.com/720494742

- Digital tangram content where characters appear when blocks are stacked according to the design (10 types) presented in the interactive table with machine learning-based object recognition technology applied.
- Eight people can experience it at the same time, and if it is matched with the proposed block shape, a pre-specified graphic appears with sound + motion.

Digital tangram play using a beam projector and an object recognition sensor.

Complete the wooden blocks by directly stacking them according to the proposed design.

When the block is completed, the matched character appears with motion and sound.

https://vimeo.com/701123163

Experience Content _ National Children's Science Museum 'Music Playing _ Interactive Touch Table'

- The experience content installed in the National Children's Science Museum provides the experience of playing a real instrument by touching the instrument picture drawn on the canvas.
- The instrument touched in real-time with the beam projector is color filled with fun motion and multi-touch sensor technology, enabling multiple people to play the instrument at the same time.

Color Mapping: Projection mapping with sound and motion.

Sensitive Touch: an intuitive instrument performance using the touch of the hand.
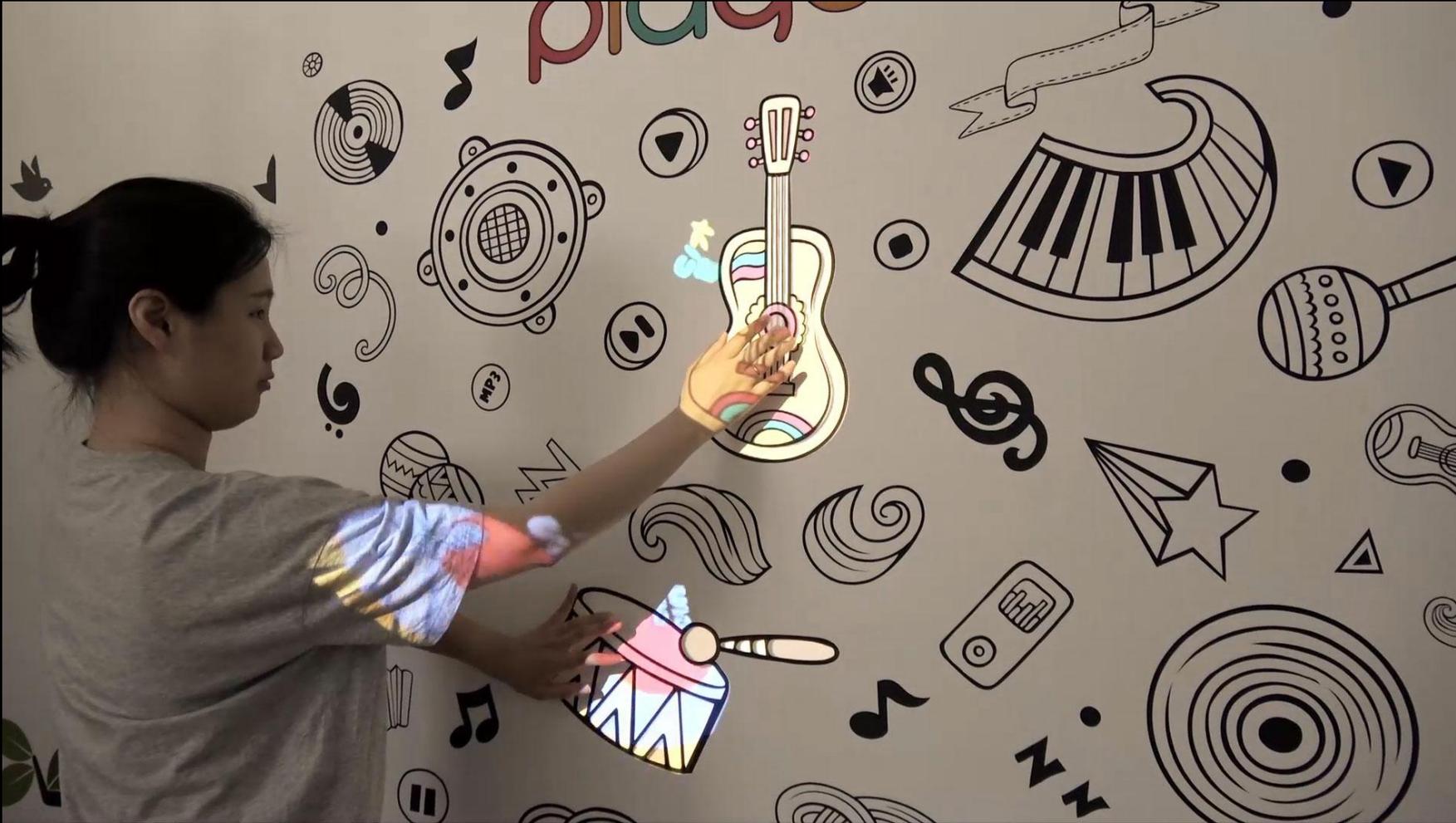

Joint Performance: Multi-touch with multiple hands-on experience

https://vimeo.com/384952619

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- A canvas painted with instruments recognizes hand touch then plays the sound of instruments and maps colors.
- Children can easily play various kinds of instrument without physical constraints.

Sensitive Touch & Color Mapping

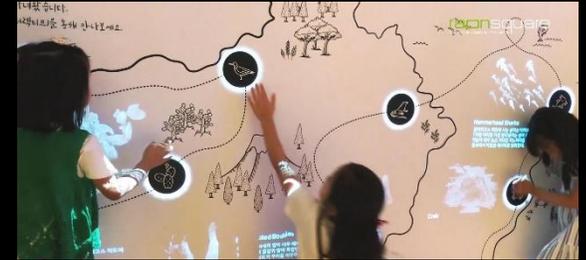Leverage projection mapping and motion graphics to provide rich experience.

Multi-touch capability for multiple people to experience at the same time.

https://vimeo.com/187596589

Experience Content _ Interactive Touch Wall

- Interactive touch wall 'Magic Wall' applied to the 'Letters for You exhibition' that lasted for two months at the Bridge Traum Belt.
- We provided emotional experience contents by utilizing our own touch sensor technology and projection mapping technology.

Multi-touch capability for multiple people to experience at the same time.

Leverage projection mapping and motion graphics to provide rich experience.

Unique touch sensor application

https://vimeo.com/292862406#t=49s

Experience Content _ Sketch POP

- Select the desired design from the touch table, color and send it, and experience content that appears in the media wall (@Lotte Outlet Young-in)
- Real-time image processing technology sends real-time images of children made. (Forest, Aqua, Space Theme)

Color the selected design in the touch table.

Transferring characters to the front media wall.

Simultaneous experience for multiple people.

https://vimeo.com/313954148

Experience Content _ Coloring Play

- You can choose the trees image, and then you put them in the paint box, and then put them on the screen, the tree show up on the screen.
- Real-time image processing technology sends real-time images of children made. (Forest, Aqua, Space Theme)
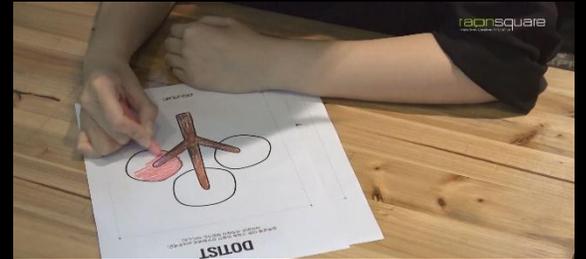
Choose the design print you want and paint as much as you want.

Scan a colored image by placing it on the recognizer.

Send pictures to the front screen

https://vimeo.com/178149151

Experience Content _ Interactive AR Media

- Emotional interactive experience contents that make a wish by receiving falling stars using motion recognition sensors. (@ Lotte Outlet Young-in)
- Deliver positive brand experience by providing emotional interactive content to customer rest areas in the shopping mall.

Shooting Star

하늘에서 떨어지는 별똥별을 잡아보는
감성적인 동작인식 기반 AR 콘텐츠

https://vimeo.com/316054867#t=79s

Multi-vision and motion recognition cameras.
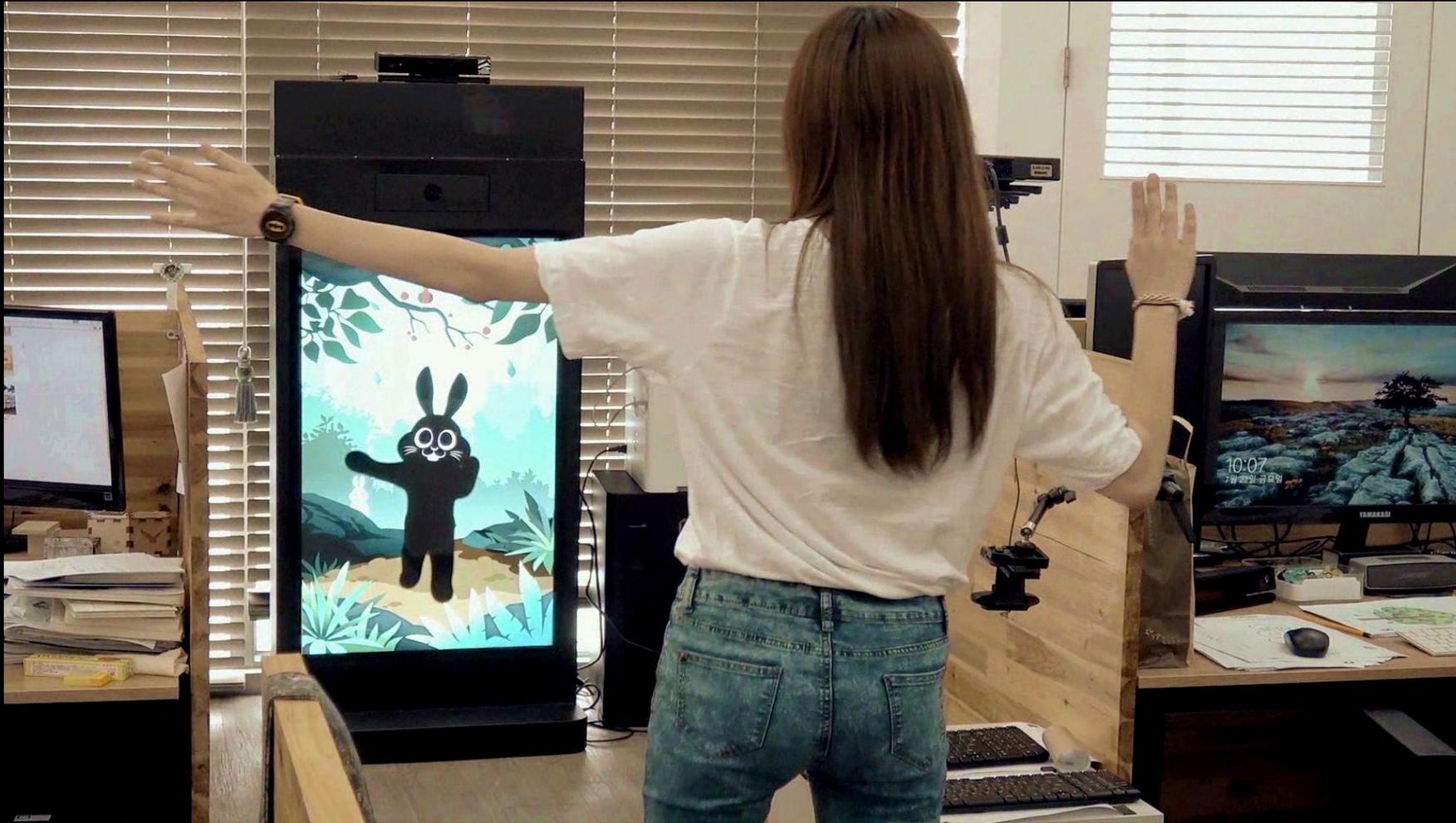

Activation of rest areas with emotional sound.

Provide users with an enjoyable experience.

Experience Content _ Shadow Play

- The Kinect sensor reflects me as a shadow and transform into animal characters.
- Children can do a physical activity by catching fruits or dancing.

Using motion recognition and joint recognition sensors to create animal shadows. (tigers, monkeys, rabbits)

It is a game where you touch the flying prey to earn points, and points are given according to the type of food.

Motion game in which animal shadows mimic user behavior in real time.

https://vimeo.com/241458528

Experience Content _ Smart CUBE : ANI & DINO CUBE

- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- An object recognition cube that learns information about endangered animals by combining six kinds of continental and six kinds of animal cubes.

Animal cubes

Dinosaur cubes

Experience by changing the slots in the cube by content. **(Patent registration)**

https://vimeo.com/190824770

Experience Content _ Smart CUBE : Hangeul CUBE

- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- A Hangeul(Korean characters) educational game combining a initial, medial, final consonant using object recognition cubes.

Learning by combining the cube according to the initial consonants, medial vowels, and longitudinal consonants of Hangul.
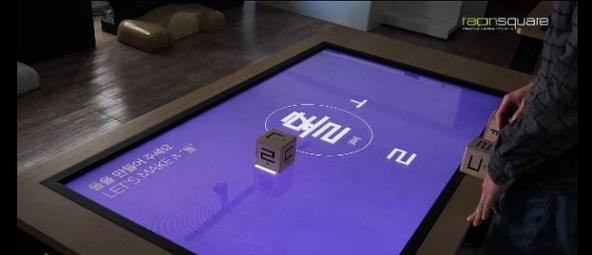
Feedback provided if the Korean combination is incorrect.

The correct answer and related visuals are exposed when matching the Korean combination.

https://vimeo.com/193313057

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Experience Content _ Smart CUBE : SURISURI CUBE

- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- Experiential contents that can learn mathematics with a combination of arithmetic operation and numerical cube by using food cube.

Combine two numeric cubes and one math cube to solve the problem.

Provide feedback if calculation is incorrect.

Different levels of difficulty for experienced children by age.

🔗 https://vimeo.com/202315421

- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- A rhythm game combining cubes which are built in various sampling and controlling a tempo and volume.

Depending on the position of the cube, the tempo and volume can be adjusted freely.

Combining a rhythm cube and a melody cube to create a variety of sounds.
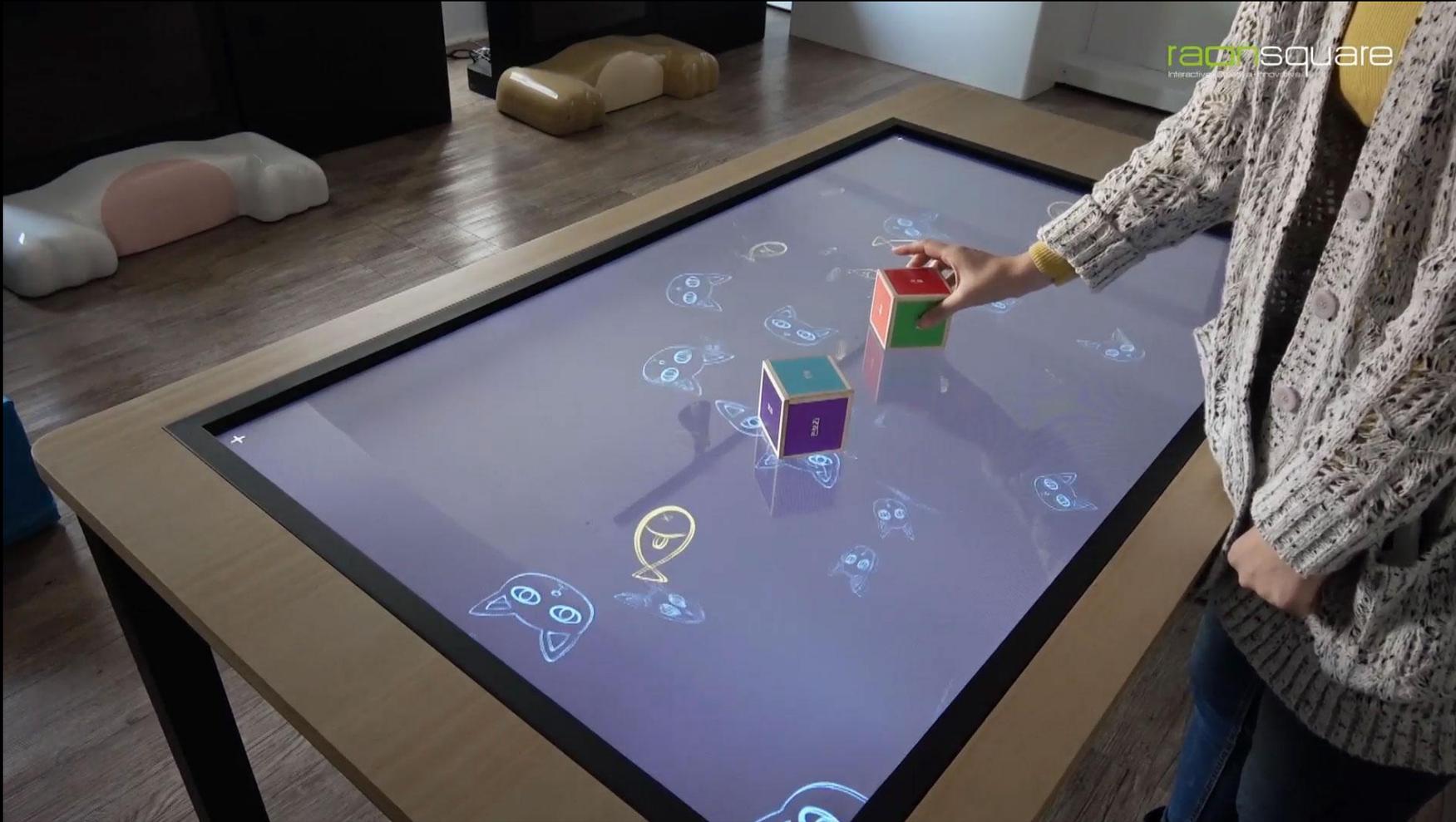

Provides connected motion effect between cubes.

https://vimeo.com/241462909

Experience Content _ Smart CUBE : Drawing CUBE

- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- Drawing game putting sketches by hands on a cube and putting down on the table which show a beautiful animation.

https://vimeo.com/241463099

Draw the desired picture directly on the touch table by hand.

If you place the cube on the picture, it will enter the cube with motion effect.

When you put down a cube, the user's drawing moves and the color of the moving picture changes whenever the side of the cube changes. (Two cubes can be used simultaneously)
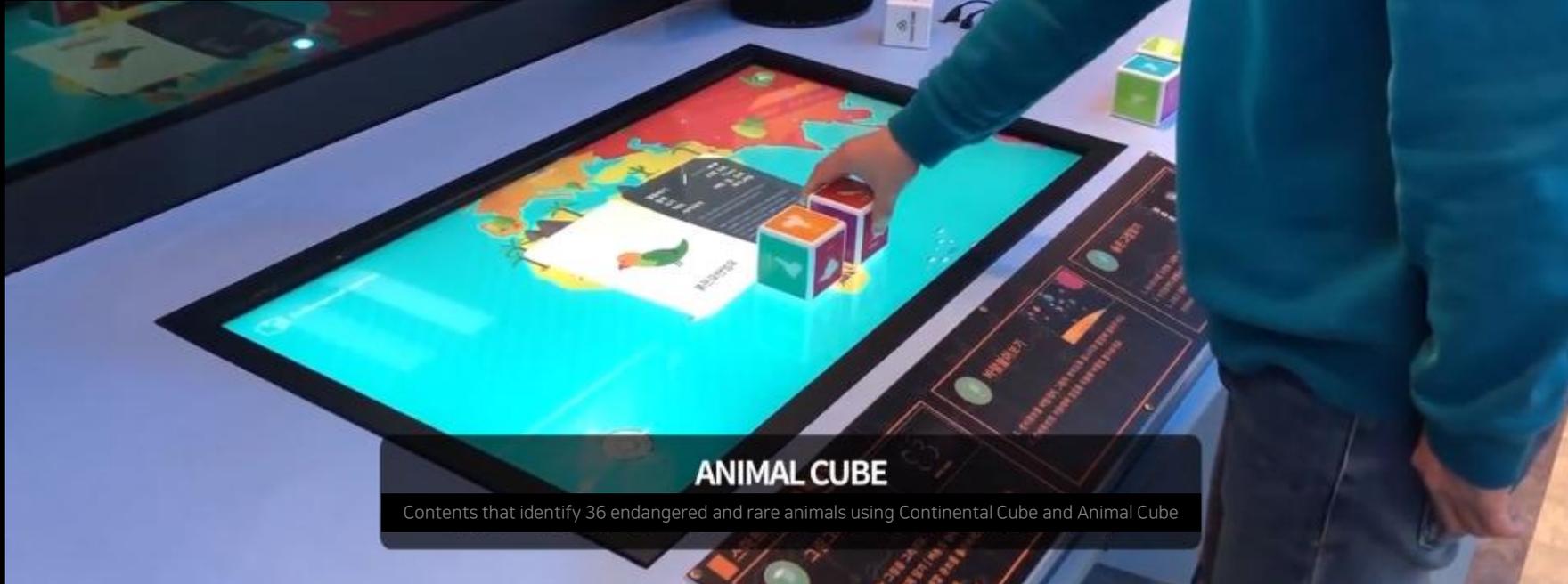
- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- Interactive experience platform based on 'Smart Cube' and 'Smart Table' utilizing communication patent technology installed in Hwangnam Elementary School Robot Experience Center in Gyeongju.

Music Cube: Music contents with cute characters can be combined into a musical instrument.

ANIMAL CUBE

Contents that identify 36 endangered and rare animals using Continental Cube and Animal Cube

Drawing Cube : Draw the picture you want, put it in a cube, and change the color with the animation.

Wind Cube : Wind blowing on the cube provides a variety of wind-borne motion effect.

Light Cube : Game content that lights up the cube to find hidden characters.

https://vimeo.com/316501384

▪ **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**

▪ A musical game combining a piece of musical instruments mapped to each side of the cube.

Play music by combining two musical instrument cubes.

Each side of the cube has a different instrument.
The character plays with animation.

Provides new digital music experience using object recognition cube.

https://vimeo.com/241458690

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- **Smart CUBE**: Interactive experience platform based on 'object recognition technology' utilizing patented communication technology between objects. **(Patent registration)**
- Touch-table based on object recognition that provides experience using various sensors mapped to each face of cube.
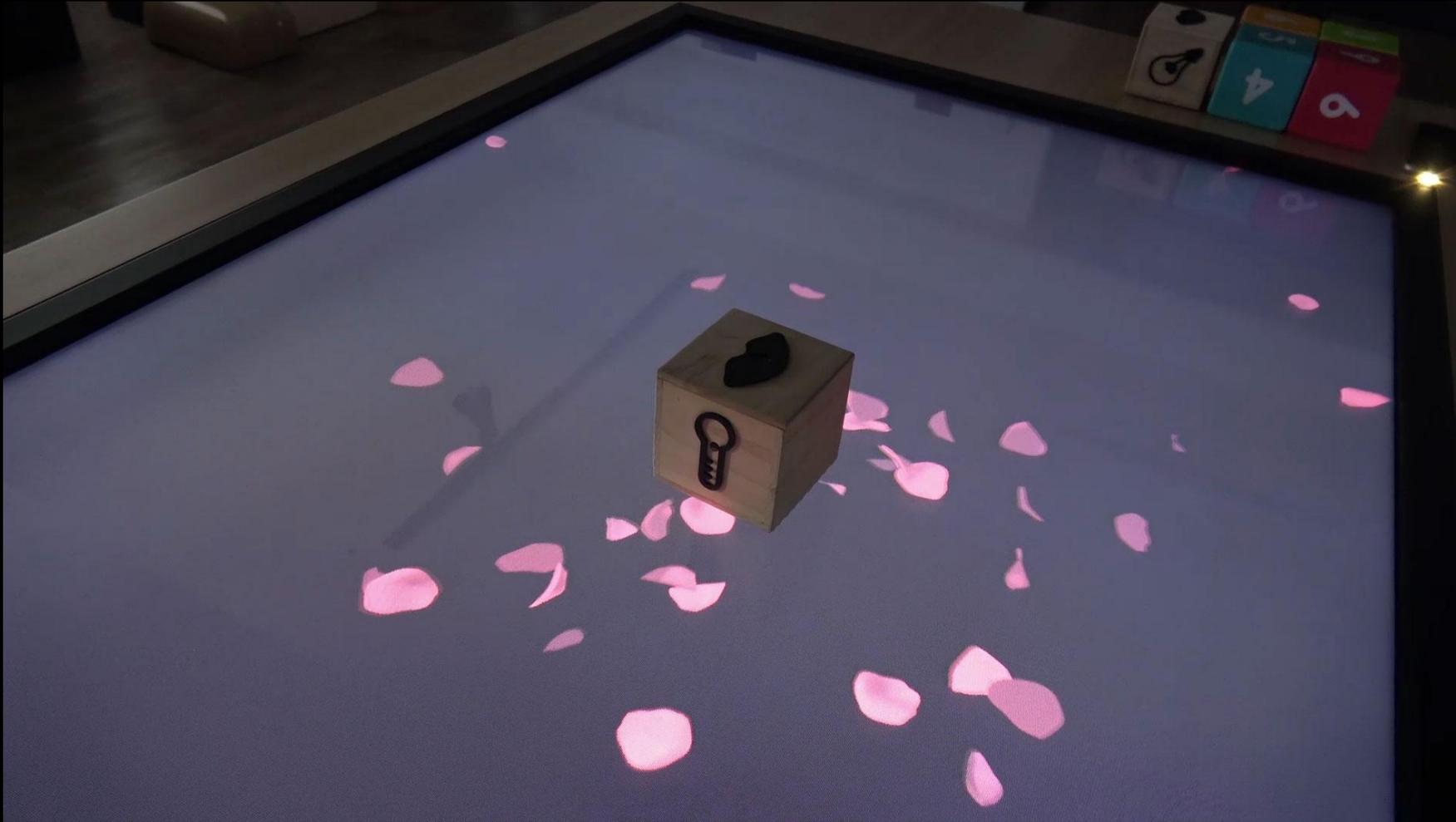
A state of blurred vision.

If Light the flashlight over the cube and the picture is shown as the area around the cube becomes bright.

An animated play with fluttering petals when the wind blows

https://www.youtube.com/watch?v=4b-i7ftDT3E

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- Interactive game that select the animal and play the music by applying the KINECT Motion Sensing.
- By checking the user's hand information (position, direction, moving), experience the animal control.

Motion Sensing (Kinect)

Interactive Sound Environment

2D character Animation

https://vimeo.com/241458514

Experience Content _ Face Swap

- Swap faces of two people using face recognition technology.
- Using face recognition technology and augmented reality technology to provide a pleasant experience.

When two faces are recognized, each face appears in the other's face area.

A state in which faces have been changed

Print and deliver photos on-site

https://vimeo.com/241617113

Experience Content _ Live Shadow

- Interactive Contents that utilize distance and rotation motion sensing and character animations.
- The user adjusts the direction and the distance of the flashlight to control the intensity of the shadow. **(Patent registered)**

Adjust the direction and distance of the flashlight directly and experience a sense of immersion.

The size of the shadow varies depending on the distance and direction of the flashlight. Pressing the flashlight button executes different animations

Motion sensing using gyro sensors and distance measuring sensors.

https://vimeo.com/144437131

Experience Content _ Be a Tree

- User experience Media wall art that provided to the user who stays in place.
- Experience the media by the wide-open operation both hands. / Offering Relaxation & Refreshing experience.

Be a Tree
두 팔을 벌리면 나무가 되어
열매를 맺거나 새들이 날아드는 동작인식 기반 AR 콘텐츠

Simultaneous recognition of multiple users.

Displaying an experience guide above the recognized user's head.

Disappear when user moves body.

https://vimeo.com/316054867#t=114s   https://vimeo.com/97810585

Experience Content _ Soul Link

- Remote Marionette using Leap Motion motion sensing and Arduino. **(Patent registered)**
- Control the marionette remotely by user's gesture, and Background Image is reactive according to marionette's movement.

Arduino + Servo motor

Leap motion-based remote control.

Recognize user gesture.

Physical computing Technology.

https://vimeo.com/107118567

Experience Content _ Word Card (with smart Buddy)

- By combining 'Smart Cube' and 'Smart Buddy', making interactive education program platform and digital game environment for kids.
- **Smart Buddy**: A small friend on the desk who delivers emotional and fun with a smartphone holder developed using beacons and aduino. **(Patent registered)**
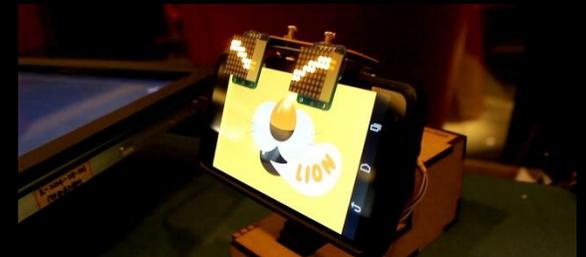

시각과 청각, 동물의 움직임 표현 등 감각을 자극하는 영어학습 체험
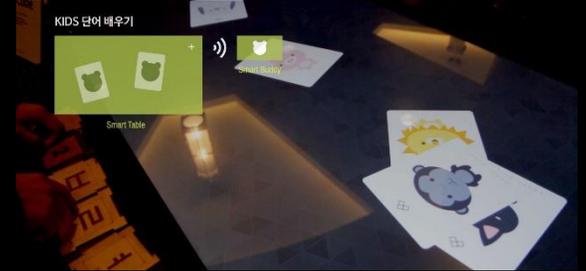
Learning English words with moving animal cards.

Send the desired card to your 'Smart buddy'.

Experience learning English that stimulates the senses, such as sight, hearing, and animal movement.

https://vimeo.com/121759757

Experience Content _ Interactive weather

- User experience Media wall art that provided to the user who stays in place.
- Experience the media by the wide-open operation both hands./ Offering Relaxation & Refreshing experience.

Interactive weather information is provided through user body recognition and object recognition.

Real-time weather data can be interlocked and multiple actions can be recognized at the same time.

Apply various design themes with cute and friendly concepts such as cotton candy and ad balloon.

https://vimeo.com/138274092

Experience Content _ IFC Shopping Mall 'Interactive Live AR'

- Multiple interactive AR contents for visitors' participation, 20 kinds of theme about Weather and Season. (2012 ~ 2019)
- Based on a remote sensing camera, it recognizes the movements of many people and provides reactive experience content.

Interactive AR advertising platform based on remote camera.

Provide real-time weather information and about 20 other experience contents.

Produce motion-aware-based advertisements and provide a variety of hands-on content.

https://vimeo.com/109103263

Experience Content _ AIA Real Life Festival 'AR Football Game'

- Development of action-based soccer game contents using motion recognition technology that can be operated outdoors.
- Operators can adjust the difficulty level wirelessly and provide prizes by dividing the grades according to the results of the experience.

Mobile Control (Game Difficulty Control)

Motion Tracking

Mixed Reality

https://vimeo.com/104082546

Experience Content _ Seoul Motor Show 'Say Hello' Interactive Photo

- Recognize the user movement, and take a photo shoot service that is installed in the Ford booth of 2015 Seoul Motor Show.
- Provide interactive contents that many people enjoy in wide space by Using the Gesture Recognition.

Take a picture by recognizing your behavior

Provide photographic prints taken

10 Second Photo Booth

Experience Content _ Pyeongchang Olympics 'Following the Mascot' (Kiosk)

- Game Contents of imitating various motions a character shows. / Offered interactive kiosk and media wall service for visitors of 2018 Pyeongchang Olympic and Paralympic.
- Provided a differentiated experience based on the latest ICT technology of movement recognition, face recognition and AR in 21 different venues.

Choose the services you want to experience.

Follow the actions of the mascot on the screen to earn a score. (Check each round score and ranking)

Important moments during the experience are provided after taking photos with a high-light shot (downloadable for sms/e-mail/QR code)

https://vimeo.com/275566203#t=132s

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Experience Content _ Pyeongchang Olympics 'Be a Champion' (Kiosk)

- A game of blocking ice hockey puck as a goal keeper based on technology of motion sensing and AR. (@2018 Pyeongchang Olympic and Paralympic)
- Provided a differentiated experience based on the latest ICT technology of movement recognition, face recognition and AR in 21 different venues.

If you stand in a designated position, you will automatically recognize the user and wear AR equipment suitable for your physique.

A goalkeeper experience game that blocks incoming ice hockey puck using hands and feet.

Important moments during the experience are provided after taking photos with a high-light shot (downloadable for sms/e-mail/QR code)

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Experience Content _ Pyeongchang Olympics 'Photo Tour' (Kiosk)

- AR Photo touring service offering multiple selection of sightseeing places based on real time Chroma-key technology. (@2018 Pyeongchang Olympic and Paralympic)
- Provided a differentiated experience based on the latest ICT technology of movement recognition, face recognition and AR in 21 different venues.

Select the place you want to take a picture.

Select the desired background image and take a picture. (3 Layer photo)

After taking pictures, send and download them to SMS / E-Mail / QR Cade.

https://vimeo.com/275566203#t=306s

Experience Content _ Pyeongchang Olympics 'Following the Action / Be a Champion' (Media Wall Ver.)

- Game-type content that mimics the various actions presented by the character. / Offered interactive kiosk and media wall service for visitors of 2018 Pyeongchang Olympic and Paralympic.
- It is a game to block the flying ice hockey puck by becoming a goalkeeper and applying motion recognition technology and augmented reality technology.

Choose the services you want to experience.

Follow the actions of the mascot on the screen to earn a score. (Check each round score and ranking)

Important moments during the experience are provided after taking photos with a high-light shot (downloadable for sms/e-mail/QR code)

🔗 https://vimeo.com/266451096

Pilot Project _ Collaboration Cat Zorba

- The children's musical "CAT ZORBA" and pilot project were conducted, and 4,000 visitors participated in the PLAYDODO experience and satisfaction survey for about two months.

Face AR Sticker (Including badges)

Paper Toy (Patent)

Interactive AR

https://vimeo.com/170143224

Commercial Project _ Kyowon Exhibition (@DDP)

- It is a future education experience exhibition held by KYOWON, an infant education company, and displayed about 10 hands-on items, including STICKER POP/CHARACTER POP/SKETCH POP.
- Under the slogan 'Experience in an Imaginary Future!' we held a differentiated experience exhibition based on face recognition, motion recognition, and object recognition technology.

Sketch pop

Character pop

Sticker pop

https://vimeo.com/249635255

Showroom _ 'DODO**LAB**'

- A showroom for the final qualification for commercialization before official opening.
- By For user feedbacks and optimizing contents.

Character pop

Sticker pop

https://vimeo.com/213477214

Showroom _ 'DODO**LAB**'

- A showroom for the final qualification for commercialization before official opening.
- We collected various opinions from invited children, parents, and teachers.

Issuing an experience card after signing up for a simple membership through the mobile web

Recognize RFID cards before proceeding

Collecting parent interviews and feedback

https://vimeo.com/213477214

- A showroom for the final qualification for commercialization before official opening.
- Introduction video for individual content

https://vimeo.com/213477061

▪ Experience Process _ DODO Band matched up with registered participant ID collects and analyzed experience data per each contents item

Register user after QR recognition

Experience after wearing 'Experience Band' for data collection

Check the experience report after completing the experience. (including the number of experiences, the number of experiences, and the results of the experience)

https://vimeo.com/237696308

Grand Prize in the 11th Digital Innovation Culture Contents
(Testing service and Marketing promotion of PLAYDODO)

- Won Grand Prize in 11th Digital Innovation New industry technology/ Culture Contents held by Ministry of Science, ICT and Future Planning and Han-kook Ilbo (Korean newspaper)
- Detailed reports and advertisements of our product/technology/management are appeared in the press and being advertised online continuously

[The grand prize for Culture Contents, Digital Innovaiton]

[Appeared in the press]

[Hangook Ilbo - Newspaper]

Certificate of 'Good Design' selection in App/Software
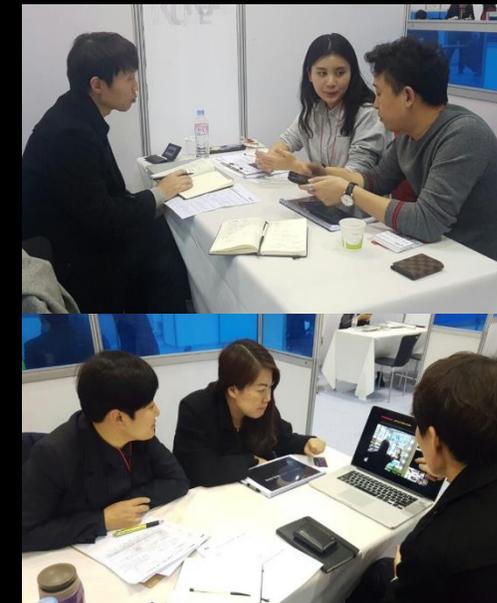(Validation test and marketing/sales of PLAYDODO)

- Selected as 2016 Good design in field of APP/Software. Progressed validation test and marketing/sales of 'PLAYDODO'
- Meeting related to '2016 Design Korea' with 6 Chinese buyers and 5 companies who have interest in booth exhibition

Good Design Selection Certificate
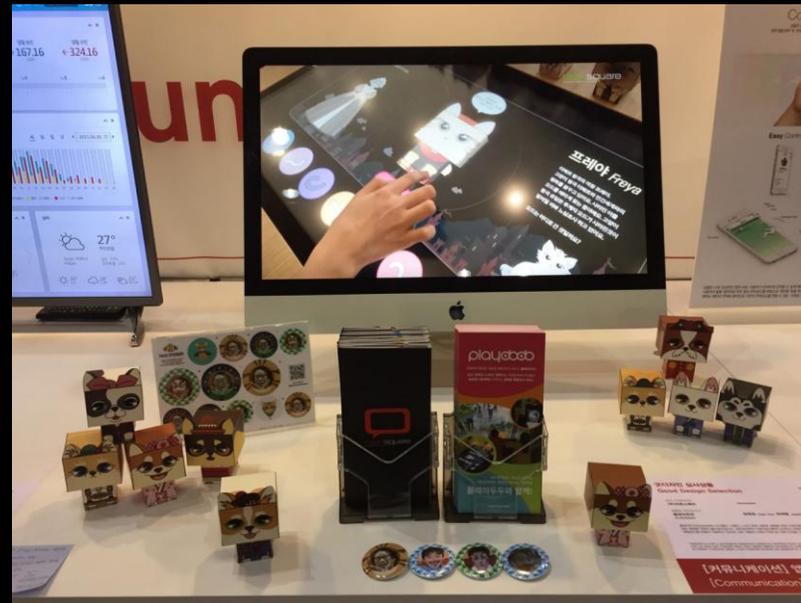
[Exhibition Participation]

[Chinese business buyer meeting]

HCI KOREA 2017 Academy exhibition participation and Thesis presentation
(To create higher brand recognition, participated in academy exhibition related with our service)

- Participated in HCI KOREA 2017 exhibition for KIDS; Introduction and marketing PLAYDODO service to the persons concerned of the related academy and industries
- Won the grand prize for HCI KOREA KIDS & PLAYDODO service test (Including thesis presentation)

[HCI KOREA 2017 KIDS AWARDS, The Grand Prize]

[Exhibition & Thesis presentation]

The 3rd Hangeul Creative Idea Award Bronze prize in Smart IT
(Validation test and marketing/sales of PLAYDODO)

▪ Won the 3rd Hangeul creative idea award Bronze prize in the field of Smart IT

▪ Product development, participating 'Hangeul' contest and experiential Contents of 'Hangeul Cube' got recognition for its creativity and commercial Value

[Bronze prize in the field of smart IT for the 3rd Hangeul Idea Award]
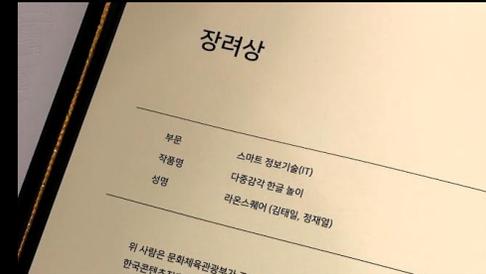
[Won the bronze prize]

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