STEM innoKey

VALUES 360 VENTURES

VALUES AT THE CORE • VALUES AT THE CORE •

STEMinnoCare

Values360Ventures builds its portfolio for the EduTech in collaboration with BLC Math, is a private company established in South Korea in 1997.

STEMinnoKey is one of the EduTechs, is an inquiry-based teaching and learning application that uses virtual manipulatives to enhance your child's math foundation and skills.

STEMinnoCare is a motion-tracking application designed to enhance cognition and motor skills. It features a comprehensive training program that includes physical exercises, motion games, and cognitive training games.

VALUES 360 VENTURES

THE VENTURE CAPITAL ADVISORY FIRM

Values360Ventures is an EU-based consultancy firm that specializes in equipping entrepreneurs, investors, and stakeholders with the resources to create social businesses and social ventures.
We also generate investment opportunities in companies with a social or environmental impact that deliver both financial and non-financial returns.

Our offices are located in Estonia, Italy, Nigeria, and Saudi Arabia.

BLC MATH, SOUTH KOREA

BLC Math is a private company established in South Korea in 1997. It specializes in mathematics and logic education for both children and the elderly through innovative programs and cognitive enhancement techniques. BLC Math is dedicated to improving the mathematical and logical skills of children through its math app, STEMinnoKey. Recently, the company has also been developing digital content, including motion-tracking technology that supports cognitive development and overall health for both young and elderly individuals.

STEMinnoCare

Utility

A physical and cognitive training application designed for children with developmental delays and the elderly faced of a declining abilities.

Aims

"**STEMinnoCare**" is a motion-tracking application designed to enhance cognition and motor skills. It features a comprehensive training program that includes physical exercises, motion games, and cognitive training games. The program consists of three main components: training, measurement, and evaluation. The training component includes various physical activities and cognitive challenges. The measurement phase includes two types of tests: one for physical ability and another for cognitive ability. In the evaluation phase, users receive individual assessments based on their performance in both training and measurement activities.

Availability

Windows, Android, and iOS to set

Space Requirements

A minimum space of 4 meters in length is required for proper functionality.

Equipment

The ideal option consists of 1 big monitor connected to 1 device (tablet).
The user needs at least a large tablet or a laptop.

FEATURES

1. TESTS

1-1 Motor Skills

Assess the motor skills for 4 minutes.

1-2 Physical Abilities

Evaluate the physical abilities through a game that involves different poses.

1-3 Cognitive Abilities

Assess the cognitive abilities through game-based questions.

2. TRAINING

2-1. Physical Exercises

Trained physical abilities such as strength, balance, endurance, etc.

2-2. Physical Activities

Train cognitive abilities by imitating movements such as ballet and dance.

2-3. Physical Games

Engage in games that involve physical movements to improve cognitive abilities.

2-4. Cognitive Games

2-4-1. Solo Games: Multi-tasking style engaging multiple cognitive domains.

2-4-2. Multiplayer Games: Enhance social connections and improve strategic reasoning.

3. EVALUATION

3-1. Tests

Assess the user's physical and cognitive abilities every 6 months.

3-2. Training

All results of individual training should be saved and evaluated.

4. MANAGEMENTS

4-1. Trainees & Their Evaluation

Trainers can manage subscriptions and evaluations of their trainees.

4-2. Homework

Trainers can generate and attribute homework to their trainees.

HOW TO USE

Register as A General User

Video guide: https://youtu.be/SUceOhDfgfU

Objectives:

You can save all your data generated from the full content use, including the regular tests to screen your physical and cognitive development.

Requirements:

You must have downloaded the app on your favorite device and opened it.
You must have a valid email address. Make sure you never used that email address before to register to STEMinnoCare.

STEP 1 On “**Home**” page, click “**Dashboard**”.

STEP 2 Click “**Login**”.

STEP 3 Click “**Register**”.

STEP 4 Write your email address in the “**Email**” text field. Your email address must be valid. You will receive an email during one of the next steps.

STEP 5 Write a password in the “**Password**” test field. The password must be 4 or more characters long. You can click the eye icon on the right of the text field to show/hide the password.

STEP 6 *(optional)*: Click the on the “**Date of birth**” text field to open a calendar, and enter your date of birth.

STEP 7 Click “**Continue**”.

STEP 8 Check your email inbox to find a message from STEMinnoCare. Inside this email, you will find a 4-digit code.

STEP 9 Come back to the application and write this 4-digit code in the text field.

STEP 10 Click “**Continue**”

After this step, your account has been successfully created. You can now log in using your email and password.

Register as A Group Manager

Video Guide: https://youtu.be/T59-YoI2H2Q

Objectives:

Use the application as a sub-program for a training center, expand training activities to home environments, and generate personalized data.

Requirements:

You must have a valid email address. Make sure you never used that email address before to register to STEMinnoCare.

STEP 1-3 Perform the same process of the general user, as above.

STEP 4 Click the “**group**” checkbox

STEP 5 Enter your email address. You will use it to log in to the application.

STEP 6 Enter a password and remember it. You will use it to log in to the application.

STEP 7 Enter a name. It can be your real name or a nickname.

STEP 8 *(optional)*: Click the dropdown to select a country from the list. Skip this step if you don’t want to communicate this information.

STEP 9 Enter the number of managed users you expect to have in your group. It doesn’t have to be accurate.

STEP 10 Click the “**Submit button**”.

STEP 11 Verify your emails and open the email you received from STEMinnoCare. If you don’t find it, please verify it didn’t arrive in your spam.

STEP 12 Copy or remember the 4-digit code written in the email.

STEP 13 Paste or write the 4-digit code written in the email.

STEP 14 Click the submit button

In case of success: You should see the following screen. You can now download the application, if you haven’t done it already, and close this web page.

2. TRAINING

Train your physical abilities such as strength, balance, endurance, and more through different activities. Train your cognitive abilities such as memory, logic, and more through different activities.

2-1. Physical Games

Video guide: https://youtu.be/udXUlb6buG4

2-2. Physical Exercises (video-based)

Video guide: https://youtu.be/-o4aF4OpNkQ

2-3. Physical Activities (animation-based)

Video guide: https://youtu.be/icQJEf7L61U

2-4. Cognitive Games

There are 2 different ways to play the games, play alone or with your friends through singleplayer and multiplayer mode.

2-4-1. Singleplayer

Video guide: https://youtu.be/5Ltcipd6Sn0

2-4-2. Multiplayer

In multiplayer games, someone creates a game room and other people (up to 6 people) join this game room to play together.

3. TESTS

3-1. Motor Skills Tests

3-2. Physical Ability Tests

3-3. Cognitive Ability Tests

3-3. Children with Disabilities

Video guide:

https://youtu.be/dENWXrfLIDE

3-4. Elderly for Dementia Screening

Video guide:

https://youtu.be/s4k5kfgBG4A

4. DATA ANALYSIS

4-1. Cognitive Abilities

4-2. Physical Abilities

4-3. History & Graphs

5. MANAGEMENT

5-1. Group Management

Video guide:

https://youtu.be/KvEeEwH0pCs

5-2. Homework Management

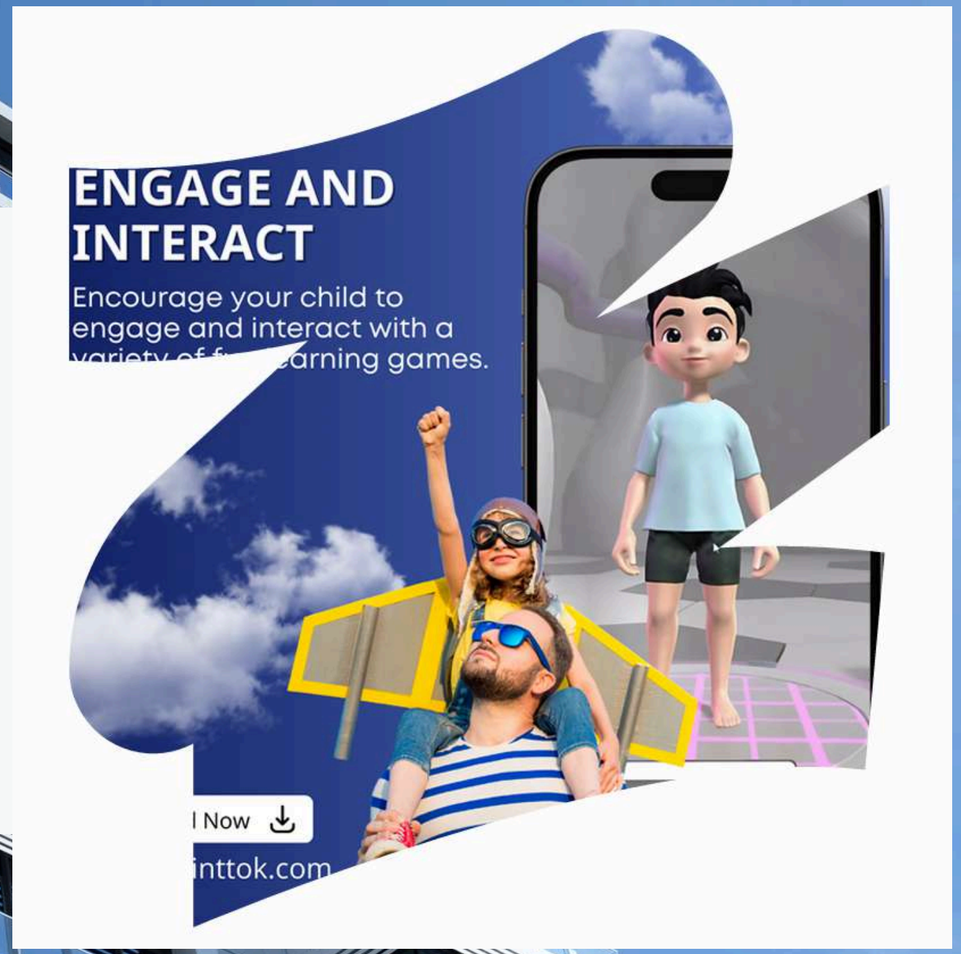
Video guide:

https://youtu.be/KqM_mOsuuBA

STEMinnoCare

Example of Use

In A Group Training Setting



INTRODUCTION

STEMinnoCare

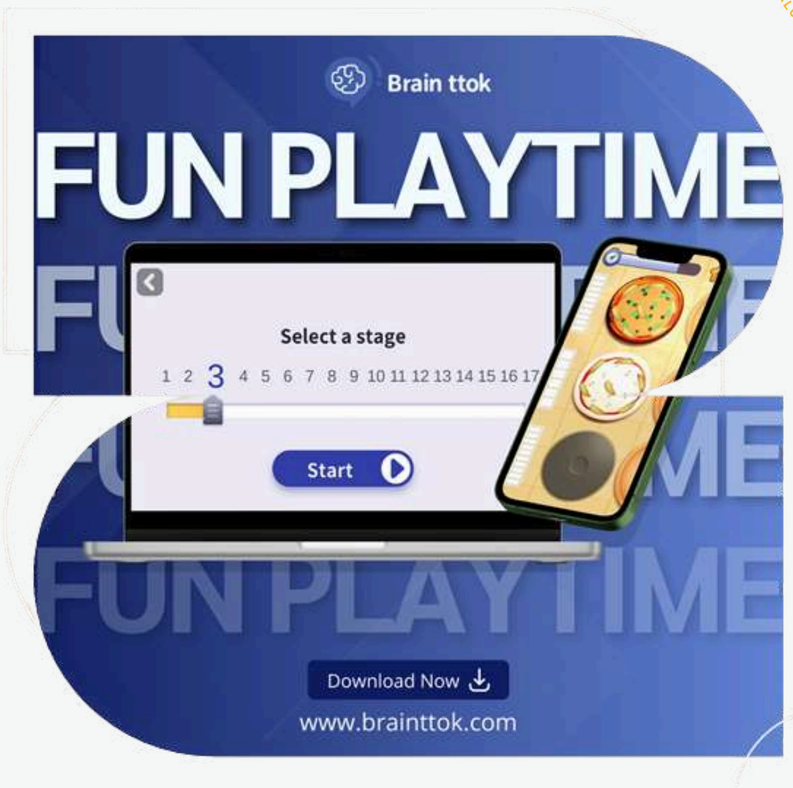
- **Powered by Values360Ventures**

"STEMinnoCare" is a motion-tracking application designed to enhance cognition and motor skills. It features a comprehensive training program that includes physical exercises, motion games, and cognitive training games.
The program consists of three main components: training, measurement, and evaluation.
The training component includes various physical activities and cognitive challenges.
The measurement phase includes two types of tests: one for physical ability and another for cognitive ability. In the evaluation phase, users receive individual assessments based on their performance in both training and measurement activities.

Example of use in a group training setting

STEMinnoCare enhances classroom lessons by extending them into the home, offering additional training for trainees. It facilitates the collection and analysis of data from each trainee's activities, which helps in planning their training for optimal progress. Moreover, it can make learning enjoyable for trainees while reducing the workload for trainers.

REQUIRED ENVIRONMENT



Space Requirements

A minimum space of 4 meters in length is required for proper functionality.

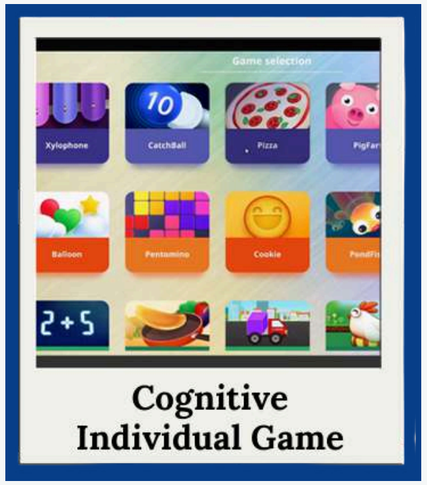
Equipment

The ideal option for a classroom consists of 1 big monitor connected to 1 trainer's device (tablet) and 1 trainee's tablet for every 2 or 3 users.
The minimum equipment is 1 big monitor connected to 1 trainer's device (tablet).
For home use, a laptop or a wide tablet is sufficient. Smartphones may be too small; therefore, if using a smartphone, it should be connected to a larger screen, such as a TV, using Bluetooth.

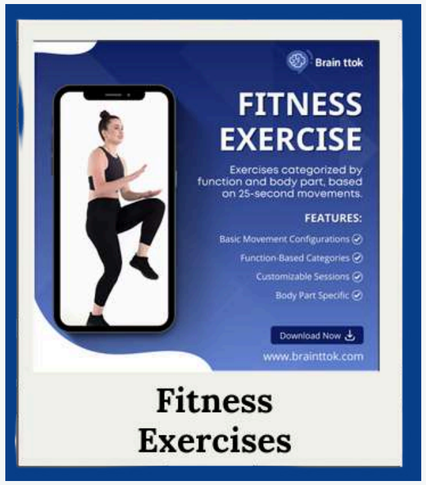
EXAMPLE OF A DAILY ACTIVITIES

Five Components

One day training plan includes three different types of games and two physical activities for a total of 45 minutes or two sessions of 25 minutes each.



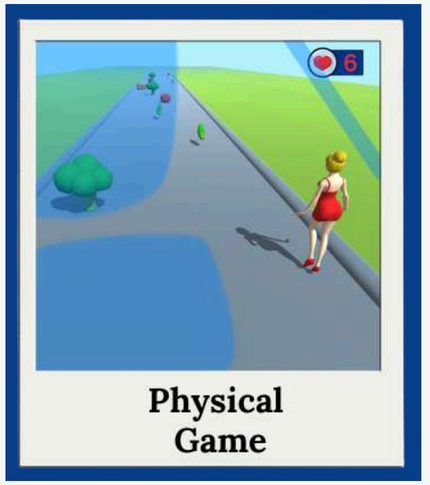
Cognitive Individual Game



Fitness Exercises

Cognitive Multiplayer Game

Physical Activities



Physical Game

DETAILED DAILY TRAINING (SESSION 1)

Cognitive Individual Game (1st day)

Objective: : Create an engaging and enjoyable atmosphere for trainees during daily training activities by demonstrating the activities to them.

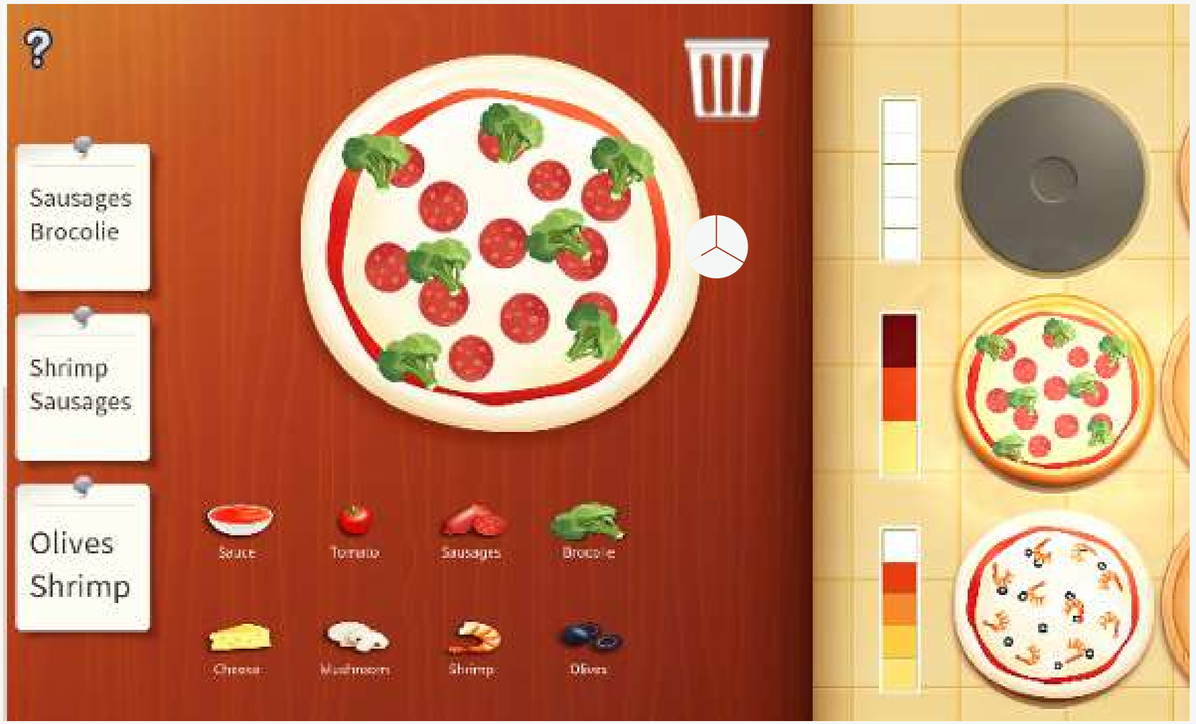
Section	Sub-section	Duration
Cognitive Individual Game	Balloons	10 minutes

Activities

If trainees have individual devices, they can play independently with the trainer's guidance.
If they do not have individual devices, trainees can collaborate and play together, following the trainer's instructions and taking turns to play the games one by one.

Additionally, each trainee can practice the same activities at home to generate data for evaluation.

DETAILED DAILY TRAINING
(SESSION 1)



Watch the associated video https://vo.la/UTGxOM

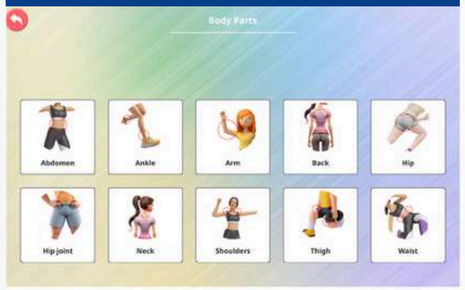
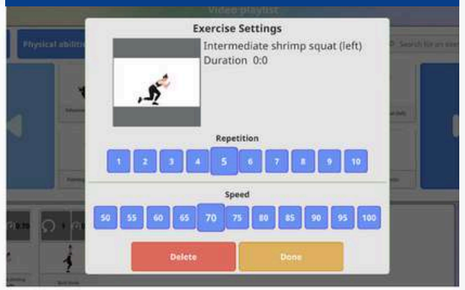
DETAILED DAILY TRAINING (SESSION 2)

Fitness Exercises (1st day)

Objective: Engage the trainees in a fitness exercise by demonstrating how to properly use it.

Section	Sub-section	Duration
Fitness Exercises	Different parts of the body	7 minutes

DETAILED DAILY TRAINING (SESSION 2)

Lower Ages	Middle Ages	Higher Ages
		
Setting : 2~4 Repetitons, 0.5 speed	Setting : 3~5 Repetitons, 0.6 speed	Setting : 4~7 Repetitons, 0.7 speed

Watch the associated video https://vo.la/mjtmRC

In the classroom, trainees can play together while following the trainer's instructions. Additionally, the trainer has the option to select a relevant training video to replace the originally provided content.

***Each trainee can then practice the same activities at home to generate data for evaluation.**

DETAILED DAILY TRAINING (SESSION 3)

Cognitive Multiplayer Game (1st day)

Objective: Create an enjoyable environment that fosters cooperative group play by demonstrating activities.

Section	Sub-section	Duration
Cognitive Multiplayer Game	Stopwatch	10 minutes

DETAILED DAILY TRAINING (SESSION 3)

Activities

Based on the gameplay features, divide the trainees into 2 to 4 groups. Each group's representative will take turns playing, rotating roles after each game. The multiplayer games are ideal for group play in the classroom.

Additionally, these games can be played remotely with friends at home, and the results can be saved.

Watch the associated video. https://vo.la/DdrvLe

DETAILED DAILY TRAINING (SESSION 4)

Physical Activities (1st day)

Objective: To showcase various physical activities, such as ballet, while ensuring they are fun and enjoyable for trainees.

Section	Sub-section	Duration
Physical Activities	Ballet for various skill levels	7 minutes

DETAILED DAILY TRAINING (SESSION 4)

In the classroom, trainees can engage in collaborative activities while following the trainer's instructions. The trainer has the option to select a relevant training video to replace the initially provided content.

Afterward, each trainee can practice these activities at home to gather data for evaluation.data for evaluation.

Lower Ages	Middle Ages	Higher Ages
		
Setting : 2~4 Repetitons, 0.5 speed	Setting : 3~5 Repetitons, 0.6 speed	Setting : 4~7 Repetitons, 0.7 speed

Watch the associated video https://vo.la/HocJKj

DETAILED DAILY TRAINING (SESSION 5)

Physical Game (1st day)

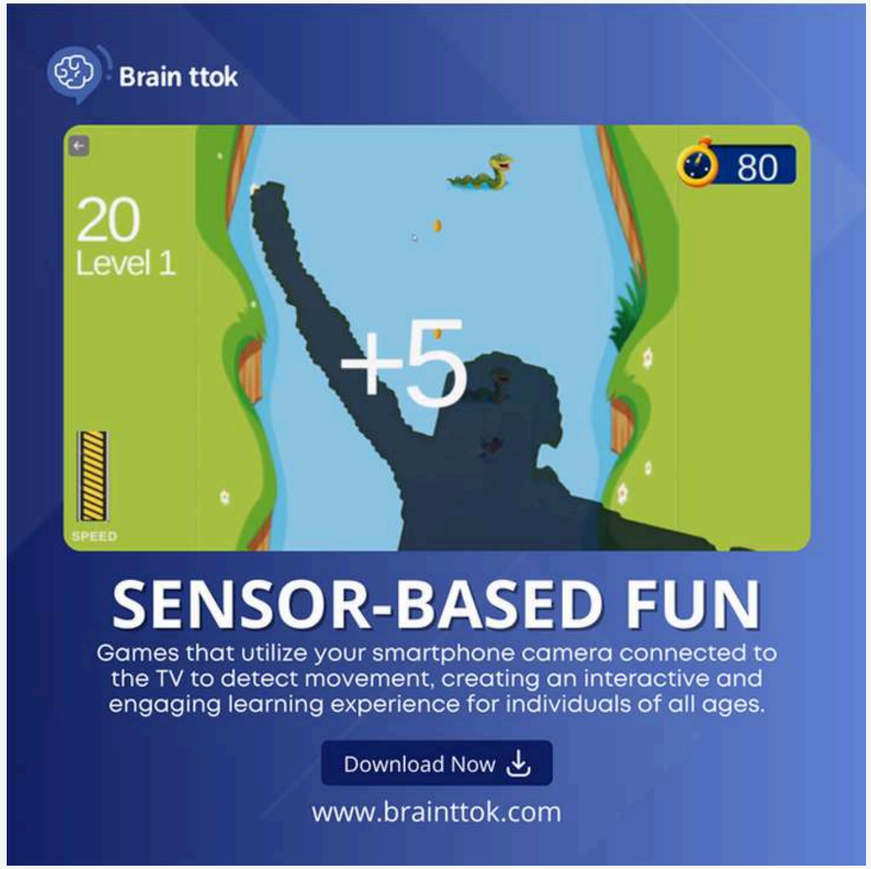
Objective: Engage the trainees in a fun activity by demonstrating how to play.

Section	Sub-section	Duration
Physical Games	Bird and Snake	10 minutes

Activities

In the classroom, one trainee stands in front of the camera to set up the body recognition system and acts as the representative. The other trainees line up behind the representative and participate in games according to the teacher's instructions, taking turns to play one by one.

Each trainee can also practice the same activities at home to generate data for evaluation.



DETAILED DAILY TRAINING (SESSION 5)

Watch the associated video.

https://vo.la/wUyTCP

HOMEWORK

- One innovative aspect of STEMinnoCare's training system is that it can increase the amount of training by linking institutional training to the home.
- The system enables users to prolong their training duration with a diverse program that includes games, exercises, ballet, and multiplayer activities.
- Group training sessions can be easily converted into homework, or trainers may assign homework individually tailored to each trainee's needs.
- Homework is an essential activity that should not be overlooked, as it provides valuable evaluation data through individual training. This data cannot be obtained through group activities.

TESTS

Physical and Cognitive Tests (second week)

Objective: Evaluate each trainee's abilities in the physical, motor skills, and cognitive domains through individual assessments.

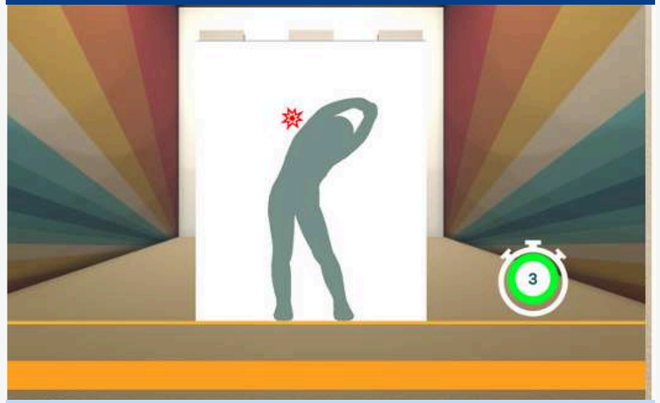
All trainees will take all three tests at home during their initial use of STEMinnoCare to collect data on cognitive and motor skills.

TESTS

Motor Skill Test

This test evaluates the motor skills of trainees and serves as an indicator of their developmental status in relation to cognitive ability assessments. It includes two versions: one for children and another for the elderly.

Physical Ability Test



The physical ability test aims to assess individuals' physical capabilities. Based on the time needed for the test, it can be categorized as either a simple or detailed evaluation, which includes endurance.

Cognitive Ability Test

This test assesses various areas of cognitive abilities. For elderly individuals, the test is categorized into three levels based on age. For children, the test can be administered every six months, with difficulty levels adjusted according to different age groups.

CONTENT-RESOURCES

Fitness Exercises

Type of resources:
- Fitness Video / Yoga Animatio

Quantity of resources:
- 130 / 80

Method of use:
- Motion tracking

Physical Activities

Type of resources:
- Ballet & Dance Video

Quantity of resources:
- 200

Method of use:
- Motion tracking

Physical Games

Type of resources:
- Motion Tracking Single Games

Quantity of resources:
- 10 (more coming soon)

Method of use:
- Motion tracking

Cognitive Games

Type of resources:
- Single / Multiplayer Mobile Games

Quantity of resources:
- 30/15 (more coming soon)

Method of use:
- Mobile Game

EXCEPTIONAL TRAINING OUTCOMES

Scientifically Based Program

Developed with the latest scientific advancements, the program promotes harmonious physical and cognitive development through a combination of motor skill exercises and cognitive games.

Clinical Trial Data

17.2% improvement was demonstrated in trials at Jeonbuk National University Hospital.

FREE TRIAL

Try the application without registration for one week and experience four weeks of free use with dedicated support. During this trial period, we will provide technical support by sharing the daily plan and answering any questions.

LET'S WORK TOGETHER

For an extended free trial, please contact us at the email below.

korea@values360ventures.com