



**KLE** Technological  
University  
Creating Value  
Leveraging Knowledge

A Report on the Course Project of  
**Design Thinking for Social Innovation (20EHSP101) titled**

## **Happy Home Orphanage**

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Centre for Engineering Education Research

## **CERTIFICATE**

This is to certify that the project entitled “INSUFFICIENT CARE FOR ORPHANS PHYSICAL AND MENTAL HEALTH” is carried out by below mentioned students Prajwal Sangalad(1745), Poonam Shettar(1748), Madhushree Hegde (1755), Tejal Shiroadkar(1756), Prashanth Aski(1736), Abhijeet Jadhav(1760) as part of DTSI Course (20EHSP101), KLE Technological University, Hubballi, during 2<sup>nd</sup> Semester of B.E program for the academic year 2021-22. The project report fulfils the requirements prescribed by KLE Technological University.

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Course Instructor

Dr Sujata S. Kotabagi

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Examiner 1:

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Examiner 2:

## DECLARATION

We hereby declare that the project work entitled “INSUFFICIENT CARE FOR ORPHANS PHYSICAL AND MENTAL HEALTH” submitted as a part of Design Thinking for Social Innovation Course during 2<sup>nd</sup> semester of academic year 2021-2022 to KLE Technological University, Hubballi, is a record of an original work done by us under the guidance of Dr Sujata S. Kotabagi. The project work and part of this report is not plagiarized to the best of our knowledge.

Date:

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## Abstract:

Everyone's life revolves around maintaining good physical health. There are many illnesses and diseases in the world today, and children are especially vulnerable to them, which might crush their hopes and aspirations at an early age.

Young children need healthy environments to grow and learn. Creating a strong foundation that will encourage them to prosper and reach their full potential is necessary. This is an early period that develops the foundation of sound mental health in the child's ability to experience, regulate, and express emotions.

The children at our chosen community (Sushanti Children Care) come from financially struggling single-parent homes. Being separated from one's parents at an early age is mentally challenging for children.

After visiting a few communities, we carefully analysed the issues in each one and picked one.

- In empathy phase, We empathetically understood and defined our problem statement.
- In Define phase we identified the primary and secondary stakeholders and their details  
Primary stakeholder: Children of orphanage.  
Secondary stakeholder: Paul L. Wilson (Owner of the orphanage)
- During the ideate phase, we generated ideas, assessed them using various methods, and then selected an ideal concept.
- We put our concepts to work in the prototype and testing phases to address the social problem we selected.
- We had good response from the kids, who were content and wanted to keep doing what we had started. Even the owner of the orphanage thought it was really helpful for the kids.

We believe that we have accomplished our goal of educating orphanage children about physical and mental health, particularly those orphanage children whose mental health needs to be taken care of. Children have expressed a desire to keep up their daily exercise and yoga routines.

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## **Table of Contents:**

List of Figures	9
List of Tables	10
1. Introduction	11
2. Empathy	
2.1. Community visit	12
2.2. Social Challenge	13
2.3. Questionnaires	14
2.4. Stakeholder Details	14
2.5. Empathy Map	15
2.6. Empathy Statement	15
3. Define	16
3.1. Stakeholder personas	17
3.2. Point of View table	17
3.3. Point of View statement	17
4. Ideate	18
4.1. System perspective	18
4.2. Brainstorming	19
4.3. SCAMPER Technique	20
4.4. Idea Evaluation	21
4.4.1. Ideation Technique	
4.4.2. Selected Idea/s	21
5. Prototyping	22

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5.1. Stakeholder Interaction	
5.2. Develop Specifications	22
5.3. Prototyping techniques	
5.4. Action Plan	25
5.5. User centric approach	
5.6. Final Prototype	25
5.7. Stakeholder demonstration	
6. Testing	28
6.1. ACT cycle	28
6.2. Feedback	29
7. Conclusion & Future scope	
References	30
<i>Appendix</i>	31

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## List of Figures

Fig. 1	Community Visit	12
Fig. 2	Empathy Map	15
Fig. 3	Stakeholder Persona	17
Fig. 4	Conduct of Exercises	26
Fig. 5	Conduct of Exercises	26
Fig. 6	Group photo after yoga session	26
Fig. 7	Group photo after drawing session	26
Fig. 8	Prize distribution	26
Fig. 9	Prize distribution	26
Fig.10	Stakeholder Feedback	28



## List of Tables

Table. 1	Stakeholder Details	16
Table. 2	Point of View table	17
Table. 3	INPUT-PROCESS-OUTPUT	18
Table. 4	Brainstorming	19
Table. 5	SCAMPER Technique	20
Table. 6	Ideas retained after SCAMPER Technique	20
Table. 7	Idea Evaluation	21
Table. 8	Idea Specifications	22
Table. 9	USER centric Approach (1,2,3)	23
Table.10	Action Plan	25

## 1. INTRODUCTION

Design thinking is a creative problem-solving method based on a human-centered approach. It ensures that products, services, and processes are rooted in the needs of people, communities, and/or end users. When using design thinking, three main dimensions are addressed – what is desirable from a human point of view, what is technologically feasible, and economically viable.

On the other hand, social innovation is the process of developing and deploying effective solutions to pressing global issues while putting people and the planet first. The concept of social innovation puts emphasis on solutions creating social and environmental value. The process enables collaborative efforts among CSOs, academia, public authorities, businesses, citizens, and other key stakeholders.

Design thinking involves 5 steps they are **EMPATHISE, DEFINE, IDEATE, PROTOTYPE and TEST.**

## 2. EMPATHY

### 2.1. Community Visit

The Social challenges identified at the community visit are as following.

**Sushanti Child Care:**



- Physical and Mental health of orphanage kids are neglected.

**Government School, Nekar colony:**



- Post pandemic students are not able to concentrate on studies as they used to do it before.

**A Conversation with Zomato Workers:**



- Not paid for pick-up distance.

## 2.2. Social Challenge

Insufficient care for ORPHAN'S physical and mental well-being

### 2.2.1 Reason for selecting the challenge (Scope)

- Physical activities strengthen children's bones, muscles, hearts and lungs.
- Improves children's coordination, balance, posture and flexibility.
- Just as physical fitness helps our body to stay strong, mental fitness helps us to achieve and sustain a state of good mental health.
- When we are mentally healthy, we enjoy our life and environment, and the people in it. We can be creative, learn, try new things, and take risks.

### 2.2.2 Location

The location of our chosen social challenge is Sushanti Children's Home , beside Chetan College of Commerce, Brahmagiri Colony , Unkal , Hubballi.

## 2.3. Stakeholder Questionnaires

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### 2.3.1. Primary Stakeholder-1 Questionnaires:

- At what time do you wake up?
- What is your morning routine?
- How much playtime do you get in a day?
- How does the food taste?

### 2.3.2. Secondary Stakeholder-2 Questionnaires:

- How many children stay in the orphanage?
- What was the food routine of the children?
- What are the measures taken for their physical and mental health?
- What are the various activities organized for them?
- Whether counselling session are conducting?

## 2.4. Stakeholder details

Stakeholder	Name	Occupation	Mobile Number
Primary-01	Rukiya	Student	-----
Primary-02	Vaibhav	Student	-----
Secondary	Paul L. Wilson	Social Worker	8050960142

- Rukiya and Vaibhav are children staying at the Sushanti child care.
- Paul L. Wilson is owner of the orphanage.

## 2.5. Empathy Map

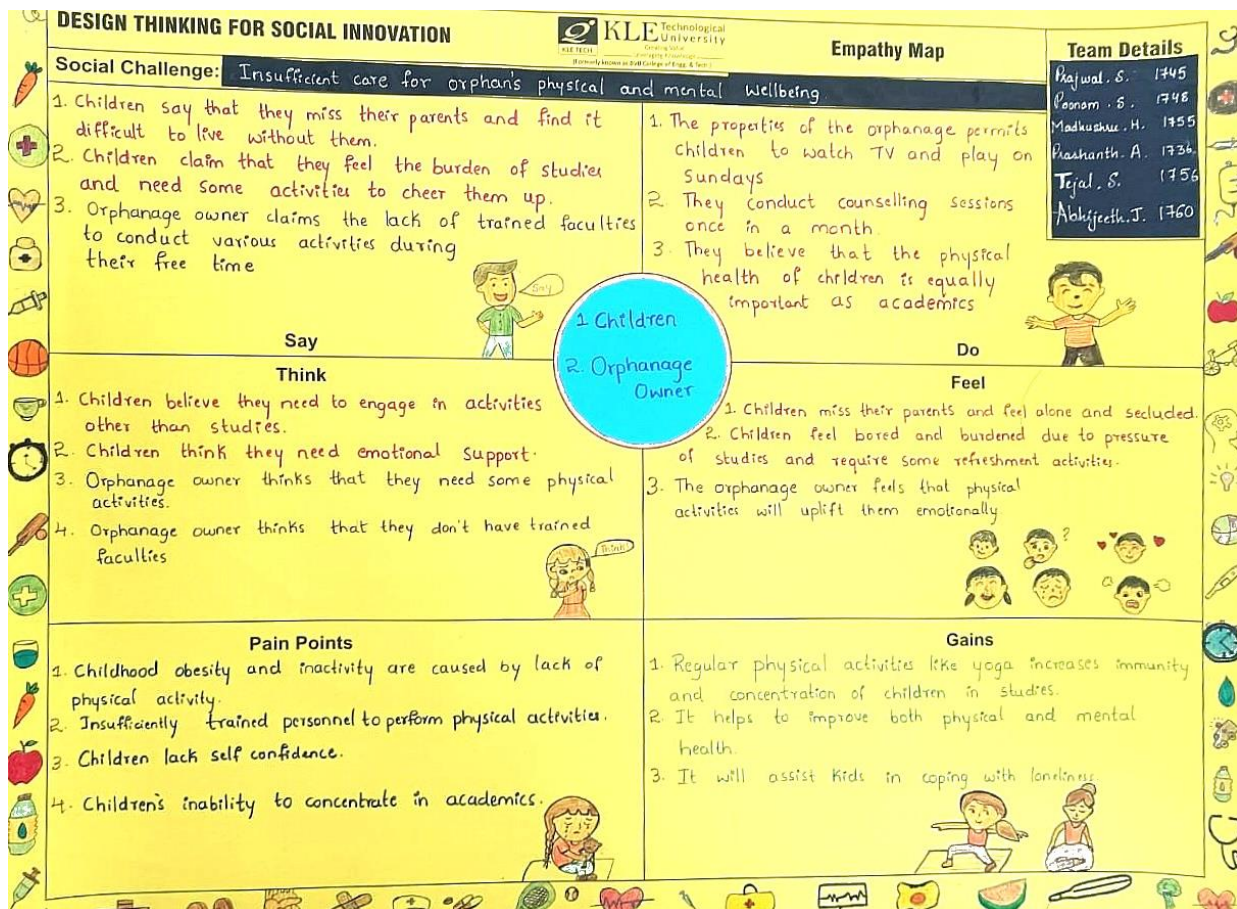
An empathy map is a collaborative visualisation tool used to articulate what we know about a particular type of user. It externalises knowledge about users in order to

- 1) create a shared understanding of user needs.
- 2) to aid in decision making.

The purpose of an empathy map is to develop a deep, shared understanding and empathy for other people you design for.

### **2.5.1. Stakeholder Empathy Map**





## 2.6. Empathy Statement

Physical and mental health issues affect all children, but they are more common in orphanages. Physical activities should be a part of every child's routine since they help them overcome loneliness and create a dynamic environment that keeps children happy.

## 3. DEFINE

### 3.1. Introduction

It is difficult for children at a young age to be separated from their parents. It may have a negative impact on a child's growth. It is very important that proper and adequate care is given to children in the absence of their parents so that they have a normal childhood.

### 3.2. Stakeholder Persona

A stakeholder persona is something where we define a problem statement from a stakeholder point of view by addressing their pain points and needs.

#### 3.2.1. Primary Stakeholder Persona



##### Demographics

Age:6  
Gender : Female  
Family :Mother and two siblings

##### Pain Points:

- She miss her mother.
- She is not able to overcome the loss of her father.
- She is mentally sick and physically unhealthy.

##### Goals/Needs:

- She wants to be Doctor.
- She wants to support her family financially.

##### Skills/Traits:

- She is good at drawing.
- She is good in academics.

#### 3.2.3. Secondary Stakeholder Persona





## Demographics:

Age:35  
Gender : Male  
Family : Mother and  
Father

### Goals:

He wishes children to be happy , healthy and successful.

### Pain Points:

- He has lack of financial support.
- Lack of trained faculties in the orphanage to engage children in physical activities.

Traits/Skills:

- He is considerate and compassionate.
- He is concerned towards the welfare of society.

### 3.3. Point of View table

Sl no	Users	Need For the user	Our Insights
1.	Children	<ul style="list-style-type: none"> <li>To become a successful person which requires being physically and mentally fit</li> <li>To have a lively and happy growing environment.</li> </ul>	<ul style="list-style-type: none"> <li>Children would like to have a proper playtime to get rid of their boredom.</li> <li>The need of refreshment activities for kids.</li> <li>The lack of physical fitness and mental stability in children</li> </ul>
2.	Owner	<ul style="list-style-type: none"> <li>Children should have a happy and thoughtful present and future.</li> </ul>	<ul style="list-style-type: none"> <li>The lack of care for physical and mental health.</li> </ul>

### 3.4. Point of View statement

The children of the orphanage, who are mostly single-parented and feel only down all the time, need to have physical activities as a part of their routine because it helps them to come out of loneliness, improve their concentration in academics and also creates a lively atmosphere, keeping the children cheerful.

## 4. IDEATE

### 4.1. System Perspective

A system perspective can help you see the big picture and help you realise that if one component is missing from an activity, the activity cannot be completed, and the system will not function as it was intended to.

**Technique used for understanding the existing system:**

#### Input-Process- Output

A process is described as a series of actions that transform inputs into desired outcomes. So, when the proper inputs are provided, a process may begin, which then causes an activity to produce an output.

SL .No	INPUT	PROCESS	OUTPUT
1	Nutritious Food	Following balanced diet	Healthy Body.
2	Counselling	Conversation between children and counsellor.	Mental Peace.
3	Making them aware of utilizing morning hours.	Waking up early.	Better mood and mental health.
4	Increasing understanding of both physical and mental health.	Performing Yoga daily.	Improved mental health, Betters, rate of metabolism , Increases concentration , strengthens body flexibility.

### 4.2. Brainstorming

Brainstorming is a method of generating ideas and sharing knowledge to solve a particular commercial or technical problem in which participants are encouraged to think without interruption.

1. To make children have a balanced diet
2. Conducting outdoor activities.
3. Making Yoga and exercises as a part of their daily routine.
4. Cultivating the habit of reading books.
5. Making children meditate for mental peace.
6. Conducting counselling sessions regularly.
7. Taking children picnic once in a while.
8. Conducting refreshment activities.
9. Making children read stories.

### 4.3. SCAMPER Technique

The SCAMPER Technique is a team brainstorming technique to develop or improve products or services. SCAMPER is an acronym for Substitute, Combine, Adapt, Modify/Magnify Purpose, Eliminate/Minimize, and Rearrange/Reverse.

### SCAMPER Technique:

<b>Substitute:</b> Healthy foods in place of junk foods.	<b>Combine:</b> Yoga can be combined with physical activities and meditation.	<b>Adapt to Technology:</b> Conducting counselling sessions through online mode.	<b>Eliminate:</b> <ul style="list-style-type: none"> <li>• Eliminating Unhealthy foods.</li> <li>• Eliminate sleeping till late Morning.</li> </ul>
<b>Modify/Magnify/Minimize:</b> Modifying their daily food to nutritious diet.	<b>Put into Other Use:</b> Conducting refreshment activities once in a week.	<b>Reverse/Rearrange/Rework:</b> Rearrange the schedule for the kids' physical education classes.	

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**Ideas retained after SCAMPER technique**

- |  |
|--|
| 1. Ensuring Children have nutritious food for healthy mind and body. |
| 2. Making an efficient and effective playtime for kids.              |
| 3. Making children practice yoga and meditation on daily basis.      |
| 4. Conducting activities like storytelling and drawing competitions. |

**4.4. Idea Evaluation**

FACTOR EVALUATION MATRIX					
FACTORS FOR EVALUATION					
1.IDEAS	2.RESOURCE	3.COST OF SERVICE	4.SAFETY FOR SERVICE	5.TIME	6.SOCIAL IMPACT
CONDUCTING YOGA SESSIONS FOR KIDS.	Appointing yoga trainer- Available- Yes/No(if No then this idea will not work)	Free of cost.	Reliable yoga trainer. Yes-Proceed (if No then look for alternative)	Daily one and half hour Yes-Proceed(if NO then look for other alternative)	Increases their concentration in studies and provides them mental peace.
Conducting drawing competition.	Providing them with drawing sheets , pencils, erasers, <u>crayons, prizes.</u>	RS 900	No issue.	One hour	Increases their nature of participation.
Conducting story telling sessions.	Providing story books .	Free of cost	No issue.	One hour	Increases their listening ability.
Conducting exercises for kids in morning	We taught them some basic exercise.	Free of cost	No issue	One and half hour	Increases their physical stability and makes them fit.

#### 4.5. Finalized Idea/s:

The Finalized ideas are

- Ensuring Children have nutritious food for healthy mind and body.
- Making an efficient and effective playtime for kids.
- Making children practice yoga and meditation on daily basis.
- Conducting activities like storytelling and drawing competitions.

## 5. PROTOTYPE

## 5.1 Stakeholder Interaction

### Primary Stakeholder:

When we told the children that we were going to conduct various activities such as drawing competitions, performing yoga, and exercising in the morning hours, They were excited and enthusiastic. By looking at the positive energy in them, it boosted our morale and motivated us to do even better and conduct even more activities. Later, we discussed with them their routine at school so that our activities don't affect their studies at school. We finalised the dates for conducting the events.

### Secondary Stakeholder:

Mr. Paul L. Wilson is the caretaker and is currently looking after the orphanage. We put up our thoughts regarding the conduct of activities. Sir was happy that we were concerned about the mental and physical health of the orphans. He extended all the support that we needed and was cooperative throughout our project.

## 5.2 Specifications

Idea	Specifications
<ul style="list-style-type: none"> <li>Making children practice Yoga, exercises and meditation on daily basis.</li> <li>Monitoring their food routine.</li> </ul>	Appointing yoga instructor to teach yoga to kids.
	Making kids understand the significance of doing yoga exercises and meditation on daily basis.
	Ensuring that they receive enough nutrients through food and follow a balanced diet.
Conducting activities like storytelling and drawing competitions.	Finalising date and time for conducting the mentioned activities in a way that it does not affect their studies.
	Choosing winners and distributing prizes.
	Selecting and buying books for storytelling.

### 5.3 User-centric Approach

Solutions	User categories	
	Children	Owner
<ul style="list-style-type: none"> <li>• Making an efficient and effective playtime for kids.</li> <li>• Making children practice yoga and meditation on daily basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Enhances physical and mental stability.</li> <li>• Increases productivity rate in children.</li> <li>• Builds good coordination among children.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensures a balanced routine in children's life.</li> <li>• Children's overall growth is focused.</li> </ul>
What if questions?	What if children don't agree to do yoga and exercises on daily basis	What if owner does not take proper initiative in making children practice yoga, exercises and meditation on daily basis.
"How might we"	<ul style="list-style-type: none"> <li>• Educating them on the value of everyday practice of yoga, meditation, and fitness</li> <li>• Yoga and exercises can be taught to kids in a fun way so they like doing them on a daily basis.</li> <li>• Planning a proper playtime for kids.</li> </ul>	Making owner realise usefulness of all the above mentioned activities for a child's healthy growth.

Solutions	User categories	
	Children	Owner
Ensuring Children have nutritious food for healthy mind and body.	For healthy mind and body. Stay energetic throughout the day and active participation in all activities.	Reduces number of children falling sick.
What if questions?	What if children deny having healthy food?	What if owner is unable to provide a balanced diet to children ?
"How might we"	Healthy food can be prepared with good taste so that children enjoy eating nutritious food.	<ul style="list-style-type: none"> <li>• Providing financial support by fundraising</li> <li>• We could contact for free food services like Akshaya Patra Foundation</li> </ul>

Solutions	User categories	
	Children	Owner
Conducting activities like story telling and drawing competitions.	Ensures compatibility among them. Creativity is utilised and boosted.	Creates a lively atmosphere in the orphanage improving the harmony.
What if questions?	-----	What if owner questions that the mentioned activities are useless and a waste of time for children
"How might we"	-----	Making Owner realise the need of refreshment activities for kids.



## 5.4 Action Plan

Sl.No	What and How	who	When	Feedback
1	Going and getting permission to conduct activities and Check their diet routine.	Team-Two members	22/08/2022	Given permission to conduct activities.
2	Conducting meditation and Yoga sessions.	Two member	23/08/2022 24/08/2022 25/08/2022 (morning 7-8am)	Children said they had a good experience and they would like to practice every day
3	Conducting Drawing and story telling sessions.	Team-Two members	23/08/2022 25/08/2022 (evening 5-6pm)	It was entertaining and change of mind

## 5.5 Final Prototype

Our prototype was to make children and the owner aware of the importance of physical and mental health among kids, which includes making them perform yoga, exercises, and meditation on a daily basis, along with following a healthy balanced diet. It concentrated on the constructive growth that is required, especially for kids who are separated from their parents at a very young age. Their mental and physical health was the peak of our prototype. It also included conducting some refreshment activities such as drawing competitions, storytelling sessions, and a few fun games to ensure a healthy mental state.

## IMPLEMENTATION OF PROTOTYPE



## 5.6 Stakeholder Demonstration

Outcomes of demonstrating the prototype:

- Children found yoga and meditation had soothing/refreshing effect on them.
- Children said they had a good experience doing yoga, exercises and meditation and would like practicing them on daily basis.
- Children enjoyed and appreciated the drawing competition.
- Our efforts to encourage kids to adopt yoga and fitness into their daily routines and to help them realise the significance of both physical and mental health were appreciated by the owner.

The owner of the orphanage was pleased with our effort in carrying out all of these activities and delighted with the enthusiastic response we received from the children.

## 6. TESTING

### 6.1. ACT cycle

After preparing a proper plan, we used ACT cycle: plan, do, check, act. We followed all the steps accordingly

- We first approached the owner of the orphanage to get his consent on allowing us to implement our prototype.
- We made owner of the orphanage realise the importance of physical and mental health among the kids of orphanage.
- After obtaining permission to conduct physical activities and yoga sessions, we initially began our prototype by motivating children to actively participate in yoga and other activities by teaching them the value of doing so.
- The orphanage kids were made to perform exercises.
- Yoga sessions were conducted in the mornings with the help of Yoga instructor.
- Through careful observation and dietary adjustments, we made sure that kids were getting enough nutrients.
- When we checked what we were doing we realised the lack of seriousness kids had in doing exercises, yoga and meditation.
- So, Yoga and exercises were designed with children in mind to make them entertaining to perform.
- For the children's refreshment, drawing competitions and storytelling sessions were held, keeping their mental health in mind.
- We kept monitoring that they have a regular playtime and a strict routine for yoga, meditation and exercises.

## 6.2. Stakeholder Feedback



### **Sushanti Children's Home**

Beside Chetan MBA College, Brahmagiri Colony, Unkal, Hubli - 580 031

**A Loving Home for every child**

A Project of Jesudas Wilson Charitable Trust (R)

Website: [www.jesudaswilson.com](http://www.jesudaswilson.com) Mail ID: [jesudaswilson@gmail.com](mailto:jesudaswilson@gmail.com)

**Date: 05.09.2022**

To.

Prajwal & Team,  
Engineering Students,  
BVB College of Engg,  
Vidyanagar, Hubli.

**Sub: To convey the regards to your team on behalf of our students and management.**

Dear team members,

Yoga, an effective art of healthy living, can be a game changer for students. It is because yoga helps every individual to unite the physical, mental, and spiritual aspects of the body. Thank you so much for taking the time to help (child) with his/her yoga and drawing class from 23.8.2022 to 25.8.2022. We can see more confidence in our children. It was a great session as both sides were in conversation you as well as child

Thank you so much for everything (yoga & drawing activity) you do for our children. All your fun activities and interesting lesson plans have taught me so much this year, Thank you for everything you've done!

Thanking You

For Jesudas Wilson Charitable Trust

  
President



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## 7. CONCLUSION & FUTURE SCOPE

**Conclusion:** We put into practise the concept of encouraging children to do yoga and exercises as well as other refreshment activities so they may understand the value of physical and mental health from a young age and contribute to a bright future.

**Limitations:** There are many similar places where the physical and emotional health of young children are at risk and are being ignored, but our effort was restricted to a smaller scale and to one orphanage.

**Future Scope:** Children nowadays are prone to a variety of physical and mental health problems, making it imperative that they receive the best possible care; otherwise, they risk losing their sense of wonderment at a very young age. Yoga, meditation, exercises, and a balanced diet practised regularly beginning at a young age may give children physical and mental stability, making it easier for them to achieve their goals, and enable them to contribute to a bright future. The implementation of this on a bigger scale will aid millions of children in having a happy childhood and a successful future because children are the country's future.