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"Empowerment of Special Meeds through Invention & Innovation"

EXTENDED ABSTRACT

MiiEX'2024

MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024

"EMPOWEREMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION"

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MiiEX'2024

MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION 2024 "EMPOWEREMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION"

EDITORSAND COMPILERS:

Dr Maimunah Johari Puan Norlinda Tendot Abu Bakar Puan Maymunah Ismail Puan Nor Halawah Ahmad Cik Afzan Shahilla Amir Hamzah Puan Azira Rahim

COVER DESIGN:

Rashidy Samsudin Wan Nur Khalisah Shamsudin Ridzuan Adli bin Azidin

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INNOVATION, INVENTION, AND DESIGN

FOREWORD BY THE RECTOR OF UITM CAWANGAN MELAKA



Professor Ts. Dr. Mohd Rasdi bin Zaidi Rector, Universiti Teknologi MARA (UiTM) Cawangan Melaka

Welcome to the Melaka International Intellectual Exposition 2024 (MIIEX '24). It is an honour for me, on behalf of UiTM Cawangan Melaka, to thank all of you for joining MIIEX '24. We are proud to inform you that this is the 13th consecutive year that UiTM Cawangan Melaka is organizing this exposition. Since 2009, UiTM Cawangan Melaka has successfully hosted this innovation exposition. Not only have we succeeded in organizing the exposition, but we have also successfully embarked on commercialized products.

2024 is a special year where MIIEX 2024 emphasizes the development of special needs. As we know, special needs indicate a limitation in a person's ability to engage in and benefit from various aspects, such as daily activities and education. Hence, with the theme "Empowering Special Needs Through Invention and Innovation," it is a platform for industries, professionals, academicians, students, and communities to share their innovative ideas and products to increase accessibility for those with special needs.

The successful implementation of MIIEX '24 is our joint success. This event was supported by the Melaka state government through YB Datuk Fairul Nizam bin Roslan, the EXCO of Science, Technology, Innovation, and Digital Communication. I also want to express my

gratitude to Universitas Negeri Padang, Indonesia, Universitas Muhammadiyah, Makassar, Indonesia, the International Association of Economic and Businesses (IAEB), Universiti Sains Islam Malaysia, Ibnu Ummi Maktum Research Center (UMMI), USIM, and The Southeast Asia Minister of Education Organization Regional Centre for Special Educational Needs (SEAMEO SEN) as our co-collaborators for MIIEX 2024.

The collaboration from various parties in MIIEX '24 is a platform that will improve cooperation and interweaving among industries, professionals, academicians, students, and communities in shaping their potential in developing innovation products. This exposition also serves as a platform to cultivate and uphold the nation's innovation culture by presenting new ideas and research by young people, especially from academia and universities. Indirectly, MIIEX '24 will encourage all inventors towards empowering Science, Technology, Engineering, and Mathematics (STEM), especially in primary and secondary schools.

The new digital landscape also inspires more innovation and new ideas that contribute to various activities, such as business and industries. As a university that encourages "Research and Innovation," we aim to foster more innovative products that benefit scholars, industries, and communities, addressing issues to improve our present and future life.

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams, who are the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition. We hope that this collaboration never ends here.

Thank you.

FOREWORD BY THE DEPUTY RECTOR (RESEARCH & INDUSTRIAL LINKAGES)



Associate Professor. Dr. Nur Hayati binti Abd Rahman

Deputy Rector (Research & Industrial Linkages), Universiti Teknologi MARA (UiTM) Cawangan Melaka

With much passion and privilege, let me warmly welcome all of you to the Melaka International Innovation Exhibition (MIIEX), UiTM Cawangan Melaka's flagship event. I firmly believe that events such as these demonstrate the gradual evolution of this platform in terms of its significance and its governing principles within the sphere of learning and the broader scholarly society.

The theme for this year, "Empowering Special Needs Through Invention and Innovation," strongly connects to our mission of using research and technology to make a positive impact on the world we live in. Besides enforcing the message of diversity, this theme also reaffirms our focus on creating products to improve the lives of people with disabilities (PWDs). Such innovations are vital as only through focused constructive changes can society become more sensitive to the needs of all members.

MIIEX allows researchers, students, and industry professionals to come together, share their innovative research, and develop viable research partnerships. It has been great to see the enthusiasm of the participants and the efforts they put into their projects, which can offer various social and economic benefits. This is why one can state that MIIEX is a great

opportunity for creating connections between the academic environment and industry, facilitating the implementation of innovative and promising projects.

Finally, I would like to express my sincere appreciation to all the members and supporters of the organizing committee, all the participants, sponsors, and everyone involved in preparing this event. I want to express my gratitude for your commitment and involvement, as the success of MIIEX and the development of an active culture of innovation in our university and beyond is partly owed to your support.

Thank you

FOREWORD BY THE PROJECT DIRECTOR



Dr Zulkefli bin Muhamad Hanapiyah Senior Lecturer

Assalamualaikum and Warmest Greetings,

It gives me a great pleasure, on behalf of the organizing committee, to welcome all participants and speakers to the Melaka International Intellectual Exposition 2024 (MIIEX '24) with the theme "Empowering Special Needs Through Invention and Innovation." We are honoured and pleased to welcome all participants to this biennial event.

MIIEX '24 is a platform that gathers experts from local and international industries, academia, scientists, researchers, and the community to contribute to the advancement of scientific and technological knowledge. This knowledge helps develop disruptive innovation products that improve daily activities for businesses and the community, especially those with special needs.

MIIEX '24 provides an atmosphere for inventors of all levels to gain new exposure and collaborate. Indirectly, this promotes a collaborative and innovative culture that focuses on cutting-edge technologies and new standards in technology and creativity.

MIIEX '24 is anticipated to serve as an arena for participants to acquire and disseminate revolutionary information on ideas and innovation. It is intended that the competition will expose the contestants' minds to the latest technologies and designs, aligning with the government's goal of encouraging innovation in Malaysia.

Finally, I want to compliment my fellow committee members on their amazing efforts, which were vital to the event's success. In addition, I want to thank our co-organizers, event sponsors, and participants. Optimistically, we hope that all new knowledge discovered, invented, or innovated will lead us toward future sustainability.

Thank you.

FOREWORD BY MELAKA STATE EXCO OF SCIENCE, TECHNOLOGY, INNOVATION AND DIGITAL COMMUNICATIONS



YB Datuk Fairul Nizam bin Roslan

Melaka State Exco of Science, Technology, Innovation and Digital Communications

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The new digital landscape also inspires more innovation and new ideas that contribute to various activities, such as business and industries. As a university that encourages "Research and Innovation," we aim to foster more innovative products that benefit scholars, industries, and communities, addressing issues to improve our present and future life.

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams, who are the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

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Thank you.

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DR MOHAMMAD NOR AFANDI BIN IBR	
DEPUTY RECTOR OF ACADENIC AFFAI	
	K5
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DEPUTY PROJECT DIRECTOR II PN AINI QAMARIAH BINTI MOHD YUSC	DF
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	MOHD AZAHAR
	RASEEDA BINTI HAMZAH
	TS. DR. NOR AFIRDAUS BINTI ZAINAL ABIDIN
DESIGN & MULTIMEDIA	EN RASHIDY SAMSUDIN
	RIDZUAN ADLI BIN AZIDIN
	WAN NUR KHALISAH SHAMSUDIN
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	NORSHAHIDATUL HASANA BINTI ISHAK
	HAZRATI ZAINI
	KHAIRUL NURMAZIANNA ISMAIL
SPONSORSHIP	DR MOHD SYUKRI BIN ABDULLAH
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	PN AZIRA RAHIM
	NORLINDA TENDOT ABU BAKAR
	AFZAN SHAHILLA AMIR HAMZAH
MEDIA & PUBLCITY	DR NOOR AFZALIZA NAZIRA BINTI IBRAHIM
	DR MOHD SUFIEAN BIN HASSAN
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	MUHAMMAD FURQAN BIN AZHAR
	KHAIRUL AZHAR BIN LOCHMAN

ABOUT MIIEX'24

MIIEX'24 is an innovation competition annually organised by UiTM Melaka with the intention to bring together ideas and inspiration that could fit in for commercialization needs. This event creates a platform for researchers to establish networking, partnership and opportunities to collaborate with industries.

OBJECTIVES

- 1. Encourage and instil passion towards inventing and innovating among UiTM Cawangan Melaka staff, students and academicians of local and international higher education institutions;
- 2. Highlight distinguished talents of skilful inventors and exhibit intellectual products, inventions and innovations among local and private tertiary institutions, government and private agencies, including international participants;
- Become an effective Business Matching platform for participating research products, matching industries and partnering government agencies;
- 4. Recognise, inspire and promote invention and innovation products to be patented and commercialized;

5. Increase passion towards inventing and innovating through research and boost interests of government and non-government agencies to obtain consultancy services from a line up experts of higher education institutions and UiTM Cawangan Melaka.

THEME

'EMPOWERMENT OF SPECIAL NEEDS THROUGH INVENTION AND INNOVATION'

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Innovative Pitcher Plant Tea Set: A Versatile Table Decoration With Multiple Compartments

Shaibatul¹, Irsyad², Farhan³, Antasha⁴, Aziera⁵, Natasha⁶

^{1, 2, 3} Faculty of Business and Management, Universiti Teknologi Mara (UiTM) Melaka, Bandaraya Melaka Campus, Melaka, Malaysia.

antashaaeishah333@gmail.com

Abstract

Serving as both a chic table decoration and a useful tea-serving solution, this inventive pitcher plant tea set offers a seamless fusion of elegance and utility. The set offers stability when in use and transforms into adorable tea cups. It has a support in the style of a tree and detachable pitcher plant cups that magnetically connect to the stand. Furthermore, the stand's vase has two convert spaces to hold little objects like sugar cubes, and its stem deftly hides four teaspoons, adding to its usefulness. Cluttered tabletops are a thing of the past thanks to an integrated coaster storage container. Conventional tea sets are not very adaptable, therefore they don't integrate well into modern households. With the pitcher plant tea set, this gap is filled and a unique solution that appeals to customers who value design as much as tea. It differs from traditional tea sets because of its distinctive design features, which include the magnetic cup connection and secret chambers. This invention not only makes sipping tea more enjoyable, but it also gives any environment a sophisticated touch. This tea set has enormous economic potential since it appeals to a variety of industries, including internet marketplaces, specialist boutiques, and sellers of home products. It is a desirable choice for customers looking for tea-serving accessories that blend elegance and utility because of its usefulness and aesthetic appeal.

Keywords: Pitcher Plant, Tea Set, Table Decoration, Versatility, Sugar Cube Storage, Teaspoon Storage, Innovation

1. INTRODUCTION

Tea sets are essential items for tea enthusiasts, yet many lack the versatility and practicality needed to seamlessly integrate into modern living spaces. Traditional designs often overlook the need for storage solutions for accompanying accessories, resulting in cluttered tabletops. This abstract presents an innovative pitcher plant tea set that addresses these challenges, offering a multifunctional solution that combines aesthetic appeal with practical utility.

2. OBJECTIVE

This pitcher plant tea set aims to transform the tea-drinking experience by offering a complete solution that meets practicality, aesthetics and minimalism. The set attempts to maximize tea time while minimizing clutter with features including removable cups, secret pockets for storing small objects, and a streamlined style inspired by pitcher plants.

3. NOVELTY & INTENTIVENESS

The pitcher plant tea set introduces several novel features, including detachable cups that double as tea cups and a tree-shaped stand with magnetic attachments for secure cup placement. Additionally, the stem of the stand cleverly concealed compartments for storing teaspoons, further maximizing space efficiency. This innovative approach to tea set design offers a fresh perspective on traditional tea-serving accessories.

4. PRACTICALITY & USEFULNESS

Designed with functionality in mind, the pitcher plant tea set elevates any environment while streamlining the tea-serving process. It is the perfect option for small living spaces since it has built-in concealed chambers to store sugar cubes and teaspoons, eliminating the need for extra storage options. Furthermore, the set's user-friendly design makes it simple to use for both casual and tea-loving customers. The pitcher plant tea set is also functional as the decoration at the dining table.

5. CONCLUSION

In conclusion, the pitcher plant tea set is a huge step forward in tea set design and provides contemporary tea consumers with a chic and adaptable option. Any house or eating area would benefit from its unique features, useful performance, and attractive appearance. The set is positioned for commercial success in the home goods industry because of its ability to simplify tea time and improve dining occasions overall.

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