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UITM SEBUAH UNIVERSITI

UNIVERSITI TEKNOLOGI MARA

20 & 21 MAY 2024

IRGEX

International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:

UST

UNIVERSITI TEKNOLOGI MARA
Perpustakaan Sultan Badlishah

Organized By:

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS, UNIVERSITI TEKNOLOGI MARA, KEDAH BRANCH

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Copy Editors: Mohd Zhafri Mohd Zukhi
Shahida Farhan Zakaria
Norin Rahayu Shamsuddin
Nor Athirah Mohd Zin
Khairul Adilah Ahmad

Cover Design: Syahrini Shawalludin
Jasmin Ilyani Ahmad

IREx 2024

The successful inauguration of IR4.0 Exposition IREx 2019 has witnessed ground breaking initiatives, ideas, and innovations materialised into numerous practival devices today. Treading on the same triumph, the College of Computing, Informatics, and Mathematics, UiTM Kedah is thrilled to announce the continuation of said event, IREx 2024 with the theme: *Innovating Ideas, Transpiring Dreams*.

The IREx 2024 aspires to incorporate even more exciting new technologies including, but not limited to, Information & Communication Technology (ICT), Educational Technology & Innovation (ED), Operational Excellence (OE), Internet of Things (IoT), Process Improvement, Ideas & Design, Multimedia, and Electronics that will chart new milestones in human history. This will serve as an excellent platform for scientists and innovators alike to meet the like-minded individuals and showcase inspiring ideas and notable innovations.

PROGRAM SCHEDULE

International Industrial Revolution 4.0 Exposition (IREx 2024)
21ST May 2024 (Tuesday)
Dewan Perdana, UiTM Kedah Branch

TIME	EVENT
8.00 – 9.00 am	Registration & Booth Set Up
9.00 am – 12.00 pm	Exhibition & Judging Session
12.00 pm – 2.00 pm	Obedient Drone Session & Break
2.00 pm – 5.00 pm	Official Closing & Prize Giving Ceremony
5.00 pm	Program Ends

Official Closing Ceremony

International Industrial Revolution 4.0 Exposition (IREx 2024)

TIME	EVENT
2.00 pm	Arrival of Guests and Participants
2.30 pm	Arrival of VVIP
2.40 pm	National anthem - Negaraku And Wawasan Setia Warga UiTM
3.00 pm	Welcoming Speech Rector's Welcoming Speech
3.10 pm	Officiating Speech Gimmick & Montage presentation
3.30 pm	Prize Giving Ceremony
4.00 pm	Photography
5.00 pm	Program Ends

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CATEGORY A

PRO CROSS-MATH CHALLENGE

Putera Affliq bin Affizal[1], Muhammad Aqil bin Mohd Rifhan[2]
[1,2]*Sekolah Kebangsaan Ibrahim, 08000 Sungai Petani, Kedah*
[1]*m-12747332@moe-dl.edu.my,*
[2]*m-12745264@moe-dl.edu.my*

ABSTRACT - Pro Cross-Math Challenge represents an innovative blend of physical approach and digital learning. This board game is a mathematical game, tailored for two to four players. Utilizing the technology provided, digital questions are generated by teachers or instructors and can be viewed by players or students through QR codes. From the questions, players will provide correct answers, then forming mathematical sentences in a crossword-style puzzle on the board, and score points by placing correct mathematical tiles on the provided cells. Inspiration for this innovation arose from students struggling with mathematics questions. This product's creation aims to enhance students' mathematical skills and their creativity as they need to understand the question, perform correct calculation then find ways to develop a new mathematical sentence. Moreover, their communication and psychomotor abilities will be more elevated in today's technology-driven era. Physically, Pro Cross-Math Challenge is compact, akin to a kraft mailer box, making it portable to carry everywhere. Additionally, creating the questions online rather than printing them each time a new question is developed makes it more eco-friendly and instantly widens the chances of being commercialized. Moreover, its user-friendly design ensures students can easily grasp the game's mechanics and enjoy learning mathematics in an engaging way.

Keywords: board game, cross-math, crossword

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