Team 4 Walls Represents Universiti Malaya as Top 10 Finalists at Malaysia Data Innovation Talent x DOSM Datathon 2024

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Team 4 Walls with YBhg. Dato' Sri Dr. Mohd Uzir Mahidin, Chief Statistician of Malaysia

Team 4 Walls Represents Universiti Malaya as a Top 10 Finalists at the Malaysia Data Innovation Talent x DOSM Datathon 2024

– By Arina Natasha, Liyana Shuib

Universiti Malaya's Team 4 Walls has earned a prestigious spot among the top 10 finalists in the Malaysia Data Innovation Talent x DOSM Datathon 2024 (MDIT x DD 2024). The team, composed of Arina Natasha, Samuel Douni, Damia Fatihah, and Atiqah Miza, was guided by their advisor, Prof. Dr. Nor Liyana Mohd Shuib. They showcased their innovative solutions during the Live Pitching Session held on November 1, 2024, at Hotel UiTM Pulau Pinang.

The competition, hosted by the Department of Statistics Malaysia (DOSM) in partnership with Universiti Teknologi MARA's Statistics Club (inStats) and the College of Computing, Informatics, and Mathematics, aimed to enhance data analysis skills and inspire innovation among university students. Centered on the theme Finding Digital and Green Skills, it challenged participants to address critical issues through creativity and collaboration.

Addressing Malaysia's Flood Challenges

Team 4 Walls presented their groundbreaking project, "Strategic Insights for Building a Safer, Flood-Resilient Malaysia." Focusing on flood management, they introduced the Flood Resilience in Malaysia dashboard. This tool aligns with Sustainable Development Goal 9 (SDG 9) and offers actionable insights to help policymakers prioritize flood-prone areas and enhance infrastructure resilience.

Key findings from their research include:

- **Flood Trends and Impacts:** An analysis of data from 2016 to 2022 revealed that flooding is Malaysia's most frequent natural disaster. States like Sarawak and Selangor experienced the highest occurrences, with infrastructure suffering the greatest financial losses.
- **Flood Resilience Index:** Using advanced methodologies such as Entropy Weight and TOPSIS, states were categorized based on resilience. High-resilience states like Sarawak and Johor showed reduced economic losses despite frequent flooding. Conversely, states with low resilience, such as W.P. Labuan and Perlis face significant risks.
- **Future Projections:** By 2030, states like Terengganu and Melaka are expected to experience an upward trend in flood risks due to urban growth and insufficient management strategies.

The dashboard developed by Team 4 Walls features detailed visualizations, aiding in the assessment of flood risks and guiding policymakers toward targeted solutions. Their insights emphasize the need for urgent interventions in vulnerable areas like Kelantan, Pahang, and Terengganu.

A Memorable Journey of Innovation and Growth

Team 4 Walls with Consolation Prize

The Live Pitching Session was followed by the closing ceremony on November 2, 2024, at the PICCA Convention Centre, Butterworth, Pulau Pinang. Participants also attended an exclusive Innovation Talk Session as part of DOSM's 75th Diamond Jubilee Anniversary. Esteemed speakers, including YBhg. Dato' Dr. Nadzman bin Mustaffa and YBrs. Tn. Hasri A. Hasan, shared their expertise on data innovation in the digital era.

Though Team 4 Walls did not secure a top-three position, their journey underscored the importance of data-driven solutions in addressing critical challenges. The experience provided invaluable lessons in time management, collaboration, and critical thinking, equipping the team with skills to make a lasting impact in Malaysia's data innovation landscape.

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