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INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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Universiti Teknologi MARA Cawangan Melaka Kampus Jasin
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HexaBingo MathQuest: Unleashing Innovation in Mathematical Learning

Suffina Long¹, Yahutazi Chik², Mohamad Musa Bohari³, and Tracy Adeline Ajo¹

¹ College of Computing, Informatics and Mathematics, Universiti Teknologi MARA Sarawak Branch, Malaysia, ²Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA Sarawak Branch, Malaysia, ³Akademi Pengajian Bahasa, Universiti Teknologi MARA Sarawak Branch, Malaysia

suffinalong@uitm.edu.my, yahutazi@uitm.edu.my, moham241@uitm.edu.my, tracy@uitm.edu.my

Abstract— HexaBingo MathQuest is an innovative board game that revolutionises mathematical learning by combining the engaging elements of Bingo with the hexagonal shape. This innovative game allows players to investigate various mathematical concepts in a dynamic and engaging environment. The hexagonal shape functions as a visually engaging and adaptable game board, providing a new spin on conventional rectangular designs. Each hexagon contains a unique mathematical puzzle, spanning from arithmetic to geometry to algebraic equations. Similar to traditional Bingo, players strategically place their markers on the corresponding hexagons as they endeavour to complete specific patterns or mathematical objectives. This game promotes reasoning, problem-solving, and critical thought. Players must analyse the mathematical properties of each hexagon, strategize their movements, and adapt their strategies in order to outwit opponents. The element of chance, reminiscent of Bingo, adds excitement, keeps participants engaged, and ensures that each game is unique. HexaBingo MathQuest provides a variety of game modes suited to various age groups and skill levels, making it an inclusive educational resource for classrooms, family gatherings and math enthusiasts. Whether players are novices or seasoned mathematicians, the game provides an immersive experience that concurrently enhances mathematical comprehension and fosters a love for the subject. This innovative approach to mathematics education promotes social interaction and collaborative learning. Teachers can use HexaBingo MathQuest to supplement classroom lessons, stimulate group discussions, and reinforce mathematical concepts through dynamic, hands-on activities. In addition, families can appreciate quality time together, thereby promoting mathematical literacy and creating lasting memories. Through its innovative combination of hexagonal gameplay and Bingo-inspired mechanics, HexaBingo MathQuest revolutionises the learning and enjoyment of mathematics. By encouraging active participation, critical thought, and social interaction, this innovative board game fosters a passion for mathematics and equips players to become competent problem solvers in the world of numbers.

Keywords—HexaBingo MathQuest, learning mathematics, gameboard.



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Universiti Teknologi MARA Cawangan Melaka

Kampus Jasin

77300 Merlimau, Melaka

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Email: jamcsiix@uitm.edu.my

Web: <https://jamcsiix.uitm.edu.my/>

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