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i - Ja M C S I I X  
2023

# ABSTRACT BOOK 2023

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INTERNATIONAL JASIN

MULTIMEDIA AND COMPUTER SCIENCE

INVENTION AND INNOVATION EXHIBITION

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## **2023**

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INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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**8th November 2023**  
**Wednesday**

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## 2023

INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE  
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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## International Jasin Multimedia & Computer Science Invention and Innovation Exhibition



# Learning Project Formulation using Gamification Approach

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**Abstract**—MOOC learning can promote flexibility and support long life learning. Unfortunately, the high turnover rate and low course completion were among the unresolved issues in MOOC learning. Thus, this project is interested in adapting and adopting a gamification approach to engage the students and to help them complete the MOOC learning. The MOOC design structure was adapted from well-established curriculum which consist of e-contents, e-activities, and gamification to engage the students with the MOOC learning. In this MOOC course, the student will be exposed to different research projects and learn to propose a complete research project by adapting and adopting gamification elements throughout the teaching and learning process. Among the gamification elements that are implemented in the MOOC design are score, leader board, tracking and progress bar as well as rewards. The students will be guided to produce a proposal for an intended project. This course not only covers theoretical components but practical implementation and demonstration of how to use various research tools. After completing this course, students should be able to explain the gaps obtained from literature in computing sciences, propose appropriate solutions to computing sciences problems, and present the proposed solution to computing sciences problems. Results from the pilot testing, involving 20 students revealed that the proposed MOOC reflected as having positive feedback on its design and effectiveness in MOOC learning.

**Keywords**—MOOC learning, gamification, project formulation, student engagement



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