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EMPOWERING NEXT-GEN EDUCATION ON ISLAMIC FINANCE WITH AI-ENHANCED, INTERACTIVE ASSESSMENTS AND LEARNING TECHNOLOGY

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ABSTRACT

In today's fast-paced and interconnected world, the traditional modes of education are evolving at an unprecedented pace. This e-learning project represents a pioneering initiative at the intersection of education, technology, and Islamic finance. The aim of this effort seeks to revolutionise the way individuals' worldwide access and comprehend complex financial principles and legal frameworks and governance within the context of Islamic finance. Leveraging the power of Massive Open Online Courses (MOOC) platforms, this project fosters accessibility and inclusivity by providing a learning environment that transcends geographical boundaries and demographic constraints. It aims to make learning more meaningful and enjoyable by offering a dynamic platform for learners of all backgrounds and levels of expertise. Central to this innovation are the meticulously integrated AI lecture videos and interactive learning materials, which serve as engaging and comprehensive learning resources. These videos not only elucidate intricate concepts but also invite learner participation through comments and discussions. Furthermore, the incorporation of interactive self-assessment tools, coupled with leaderboard gamification, ensures that learners can measure their progress, compete, and collaborate with peers. The project envisions a future where anyone, regardless of their geographical location or prior knowledge, can access high-quality education on Islamic financial legal frameworks and governance. By harnessing the capabilities of AI-enhanced technology, interactive assessments, and multimedia content, this initiative strives to empower the next generation of learners, equipping them with the knowledge and skills needed to navigate the dynamic landscape of Islamic Financial Legal Framework and Governance course effectively. In doing so, it contributes to the broader goal of promoting financial inclusivity and fostering a more informed global community in the realm of Islamic Financial Legal Framework and Governance course.

Key Words: AI, *e-learning*, *Gamification*, *Islamic Finance*, *MOOC*.

1. INTRODUCTION

Islamic Financial Legal Framework and Governance course should align with technology to ensure that the new generation of students can effectively grasp the subject matter. Hence, the primary aim of this Massive Open Online Course (MOOC) project is to align with the requirements of contemporary teaching and learning. Some MOOCs merely replicate conventional teaching pedagogies, incorporating multimedia elements such as video lectures. In contrast, others venture further by striving to actively involve the vast number of participants through the encouragement of discussions and by depending on their contributions to the course, as noted by Alario-Hoyos et al. (2013).

To further enhance and keep pace with evolving technology, artificial intelligence (AI) elements have been integrated into this MOOC project. AI creates and provides more effective online materials as it increases visual perception, legibility, readability, reading comprehension, and memorability of content (Mackare & Jansone, 2019). This Islamic Financial Legal Framework and Governance MOOC offers a comprehensive array of materials, including hand-out notes, instructional videos, assessments, supplementary resources, and a dedicated feedback section.

Delivering the teaching and AI videos stands as a cornerstone in these courses. It becomes particularly intriguing to explore innovations that enable users to engage in multimedia interactions and collaborative activities within the videos, as highlighted by Monedero-Moya et al. (2015). In addition, the adoption of methodologies and practices from distance learning (MOOC) and gamification is a promising basis to facilitate the design of a new generation of MOOCs (Leung et al., 2023a)

A game-based assessment tool holds the potential to boost learning motivation and concentration while also autonomously evaluating the effectiveness of the learning process. Nonetheless, in the context of online education where learners largely self-manage their learning experiences, issues such as diminished motivation, reduced concentration, and lower completion rates have emerged as notable challenges. Findings by (Leung et al., 2023b) add to Self-Regulated Learning theory (SRL) theory by demonstrating that gamification designs can enhance SRL engagement and learning outcomes in online learning. Supported by Jo et al. (2023), a sufficiently high potential was identified regarding the educational usability of the game-based assessment tool.

2. PROJECT COMPONENTS

This Islamic financial legal frameworks and governance MOOC comprises 8 chapters, each structured uniformly. The design prioritises user-friendliness and encourages active engagement. Music also has been integrated with interactivity to enhance the learning experience. With regards to a study conducted by Bonk et al. (2018) that introduced multimedia and other elements to personalise their massive courses found that a significant majority of the respondents expressed a strong or moderate interest in learning new techniques to personalise their forthcoming MOOC offerings. In accordance with MOOC requirements, the key resources and tools integrated into the MOOCs encompassed discussion forums, video lectures, handout notes, and self-assessment components.

2.1 AI Video to Enhance Understanding

In this Islamic Financial Legal Framework and Governance MOOC project, the AI-powered video component has been introduced. Within each chapter, the content is seamlessly integrated with AI in video technology, with the goal of delivering a personalised, interactive, and highly effective learning experience. This integration ultimately enhances the comprehension of educational material. A sample of AI video can be observed in Figure 1 below.

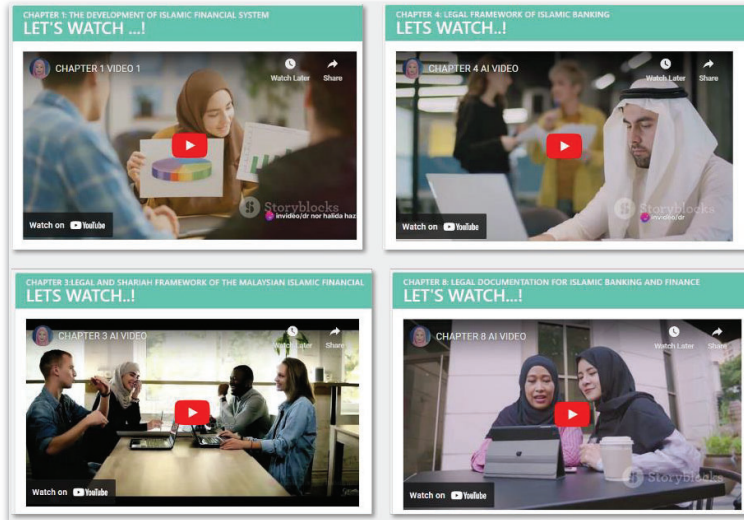


Figure 1. Samples of AI Videos

2.2 Use of Multimedia for Modern Learning Experience

Utilisation of multimedia as a learning technology in MOOCs course can transform the educational landscape of Islamic financial legal frameworks and governance course by offering engaging, accessible, and effective learning experiences. Indeed, using animated GIFs can be a valuable addition to the learning environment. This approach has the potential to benefit a wide and diverse audience of learners by making educational content more visually appealing, interactive, and comprehensible. When thoughtfully integrated into the learning materials, animated GIFs have the power to enhance the overall educational experience and contribute to improved retention and understanding of the subject matter. Moreover, this type of multimedia component can be easily integrated into online courses and learning platforms, ensuring accessibility for a wide range of learners. It often has a fun and informal quality, which can make learning more enjoyable and less intimidating.

In this project, the topics are presented in a GIF format, utilizing multimedia principles, where text is animated with attractive colours and legible fonts. The image size is optimised for easy viewing and readability. Samples of topics within the Islamic financial legal frameworks and governance MOOC system is presented in figure 2.

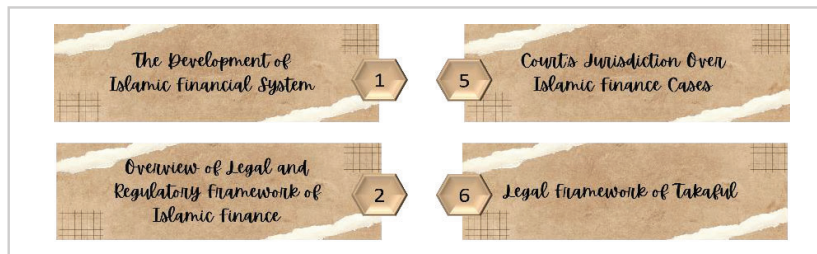


Figure 2. Samples of Topics Using Multimedia Element

2.3 Interactive Assessment

Gamification has been strategically chosen as an integral element for this Islamic financial legal frameworks and governance MOOC with the primary aim of enhancing learner engagement and fostering interactivity. Gamification tools make learning more interactive and engaging, capturing learners' interest and motivating them to actively participate in educational activities. It also helps to improved retention by incorporating game elements such as challenges, rewards, and competition, these tools facilitate better retention of information and concepts, leading to more effective learning outcomes.

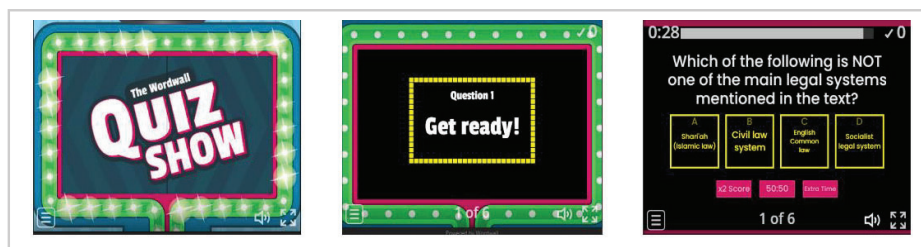


Figure 3. Samples of Interactive Assessment

Wordwall online tools have been employed to fulfil this objective. Samples of the assessment are displayed in Figure 3 above. While the question type has been standardised using multiple-choice questions, a deliberate selection of diverse themes has been made to differentiate between topics and introduce an element of enjoyment. Various colours have been thoughtfully employed to enhance learner engagement and promote interactivity.

3. CONCLUSION AND RECOMMENDATION

In conclusion, the development project for this Islamic Financial Legal Framework and Governance MOOC, strengthened by multimedia elements, interactive assessment tools, and AI-powered video technology, has paved the way to empower the next generation of education in the field of Islamic financial legal frameworks and governance. This innovative approach has not only enhanced the accessibility and comprehensibility of the subject but also opened new avenues for students to engage with and master the intricacies of Islamic financial legal frameworks and governance in a dynamic and technology-driven learning environment.

This innovative approach not only enhances engagement and motivation but also fosters personalised learning experiences. As we embrace the transformative power of technology in education, the potential for broader access and more effective learning outcomes in the digital landscape becomes increasingly promising. This project represents a significant step forward in the evolution of education, striving to meet the dynamic needs of modern learners and empower them with the tools to succeed in an ever-changing world.

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