



香港城市大學
City University of Hong Kong

Management Accounting Quest App: Gamified AI Learning Experience for Real-World Business Problem-Solving for Generation Z

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Principal Investigator: Prof. Oleg KIRIUKHIN

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Abstract:

This project proposes the development of a gamified learning app for business education (“Management Accounting Quest”), specifically designed to meet the educational needs of Generation Z students through an engaging, interactive platform. The app is intended to simulate real-world business consulting scenarios, where students through a game will be engaged in solving complex dynamic business problems characterized by a mixture of numerical data and qualitative information, reflecting the ambiguity and complexity inherent in real-world decision-making.

In the game, students will analyze incomplete information, assess risks, and develop strategic solutions, enhancing critical thinking and problem-solving skills. By playing “Management Accounting Quest”, students will develop not only a deeper understanding of business principles but also essential soft skills such as adaptability, multi-perspective thinking, and creativity.

Unlike traditional textbook-based or static problems, this app will use narrative elements and warm-hearted characters to engage students both emotionally and intellectually. The characters in the game will have individual personalities that are relatable to younger generations. The narrative-driven storyline and humorous characters will be designed to align with Generation Z learning preferences, ensuring their active participation and sustained engagement. The app will have a reward system for successful outcomes, further motivating students and ensuring consistent engagement.

The unique pedagogical features of this app will include real-world complexity, gamified learning, and adaptive feedback. Research in educational psychology highlights the importance of gamified and plot-based learning in improving student outcomes, and this app builds on these principles.

The app will have a modular design that will allow to incorporate the curriculum of various business courses. Generative artificial intelligence will be used to create dynamic scenarios with unique images, corresponding descriptions, and a set of possible decisions and outcomes, which will provide users with an almost infinite number of personalized learning cases. With great potential for scalability, the app will serve as a model for integrating gamified learning into business curricula.