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## Personality Based Adaptive E-Learning 3D Game

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**Abstract :** Educational games are popular among current e-learning systems. The approach to education through interactive media is expected to motivate students and encourage participation and engagement. 'Kalayathra' is an adaptive, player centered e-learning 3D game. The game identifies the player's personality and adapt the gaming environment according to the player's preference. Our platform measures the student's performance and support learning through player assessment. Player experience is a good measure of the level of fun and education presented to players. To assess the level of playability we introduce an educational playability model. 'Kalayathra' is developed according to the GCE O/L syllabus and teaching guide in Sri Lankan education system. The game is capable of guiding players into the environment and aid them in tasks and activities depending on how much the player requires help.

Keywords: e-learning, games, adaptive, personality, gamification, player experience

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