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(57) Abstract :
The present invention relates to Akshar Arena, a speech-enabled adaptive game system and method for learning English based on Indian civilization, history and culture. Language tasks are embedded into the rules of traditional Indian games such as Moksha Patam, Antakshari, Pachisi, Chaturanga and Panchatantra storytelling, so that each game-state transition depends on the correctness of the learner's response. Six CEFR-aligned levels, from Basic to Corporate and Academic, are themed on successive eras of Indian history. An on-device speech assessment module scores pronunciation and fluency by aligning speech with known reference text without transmitting audio. A knowledge-tracing learner model and an adaptive controller personalise both tasks and game mechanics. A grounded dialogue engine enables conversation with historical characters whose statements are verified against a curated heritage knowledge base. The invention provides engaging, culturally rooted, privacy-preserving and adaptive English learning.

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