

# LITTLE TROUBADOUR: AN OPEN SOURCE PLATFORM FOR ENHANCING MUSICAL SKILLS IN PRESCHOOL CHILDREN

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Little troubadour is an open-source platform designed to stimulate the development of auditory perception as well as musical abilities, skills, and knowledge in young children. It combines a variety of interactive musical games focused on developing skills such as auditory differentiation, recognition of tonal movement, duration of tones, and finding pairs of sounds, tones, and rhythmic-melodic patterns. The platform facilitates automatic generation of exercises, ensuring a dynamic and tailored learning experience, while also providing immediate feedback on a child's progress. To increase motivation and engagement in children, Little Troubadour includes gamification elements such as badges, levels, and rewards. The presentation will cover the results of the platform's evaluation conducted on a preschool-age population. The evaluation of the Trubadurček platform has revealed characteristics and potential improvements for further development of music-educational games for preschool children. These findings enable us to formulate clear guidelines for

further adaptations and enhancements of the platform that meet the needs and characteristics of this age group of children.

**Keywords:** little troubadour, e-learning, musical games, auditory perception, musical abilities, gamification elements

### **Trubadurček: Odprtokodna platforma za razvoj glasbenih spretnosti za predšolske otroke**

Trubadurček je odprtokodna platforma za stimuliranje razvoja slušnega zaznavanja ter glasbenih sposobnosti, spretnosti in znanj za mlajše otroke. Združuje vrsto interaktivnih glasbenih iger, ki se osredotočajo na razvoj veščin, kot so slušno razlikovanje, prepoznavanje tonskega gibanja, trajanja tonov ter iskanje parov zvokov, tonov in ritmično-melodičnih vzorcev. Omogoča avtomatsko generiranje vaj, kar zagotavlja dinamično in prilagojeno učno izkušnjo, hkrati pa otroku nudi takojšnje povratne informacije o njegovem napredku. Z namenom povečevanja motivacije in angažiranosti otrok, Trubadurček vsebuje poigritvene elemente, kot so značke, nivoji, nagrade. V okviru predstavitve povzetka bodo predstavljeni rezultati evalvacije platforme, izvedene na populaciji predšolskih otrok. Evaluacija platforme Trubadurček je razkrila značilnosti in potencialne izboljšave za nadaljnji razvoj glasbeno-izobraževalnih iger za predšolske otroke. Te ugotovitve nam omogočajo oblikovanje jasnih smernic za nadaljnje prilagoditve in izboljšave platforme, ki ustrezajo potrebam in značilnostim te starostne skupine otrok.

**Ključne besede:** Trubadurček, e-učenje, glasbene igre, slušno zaznavanje, glasbene sposobnosti, poigritveni elementi