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Platforma Trubadur za samostojno učenje in učenje na daljavo

Leta 2020 je bila razvita platforma Trubadur (<https://trubadur.si>) za pomoč pri učnem procesu glasbene teorije z avtomatiziranimi vajami za urjenje sluha. V nasprotju s številnimi aplikacijami in izdelki, povezanimi z glasbeno vadbo, glasbena teorija in vadba posluha ne dosegata stopnje priljubljenosti med uporabniki samouki. Nadaljnje so komercialne platforme omejene, saj ne ponujajo fleksibilnosti prilagajanja vsebin glede na različne učne načrte, ki so pogosto predpisani s strani izobraževalnih agencij in ministrstev. Motivacija za razvoj učne platforme Trubadur leži v njeni dostopnosti v obliki prosto dostopne spletne in mobilne aplikacije kot tudi v razpoložljivosti izvorne kode. Za usposabljanje, povezano z glasbo, platforma ponuja dostopno orodje za glasbeno usposabljanje z uporabo avtomatiziranih vaj, ki dopolnjujejo obseg obstoječih sistemov za upravljanje učenja. Platforma omogoča učencem, da prejmejo neposredne povratne informacije o svoji uspešnosti in prilagojene, samodejno ustvarjene in ocenjene vaje, ki jih vodi učitelj. Platforma uporablja več elementov igrifikacije za povečanje motivacije učencev, kot so neposredne povratne informacije, rezultati, ravni, lestvice najboljših, avatarji in značke, medtem ko učiteljem omogoča urejanje in spreminjanje samodejno ustvarjenih vaj ter spremljanje učenčevega napredka. V zadnjih treh letih od lansiranja je bila Platforma večkrat evalvirana, rezultati pa so pokazali signifikantno povečanje uspešnosti tudi pri konvencionalnih učnih preverjanjih v več testnih skupinah, ki so uporabljale platformo Trubadur, v primerjavi s kontrolnimi skupinami, kot longitudinalne študije uporabe platforme Trubadur kot orodja za učenje na daljavo med pandemijo Covid-19. Platformo smo v letošnjem letu nadgradili na različico 2.0 in izdali mobilni aplikaciji za platformi iOS in Android. Trubadur sedaj vsebuje sedem različnih izobraževalnih iger, kot so ritmični, intervalni in harmonski narek za osnovne in srednje šole, v zadnji različici pa sta na voljo tudi igri inverznega intervalnega in harmonskega nareka, pri katerih uporabnik zapoje zapisano notno zaporedje, mobilna naprava pa razbere tonske višine in avtomatično ovrednoti pravilnost, ki jo neposredno prikaže uporabniku.

The Troubadour Platform for Independent and Distance Learning

In 2020, the Troubadour platform (<https://trubadur.si>) was developed to enhance the learning process of music theory through automated ear training exercises. Unlike many apps and products related to music training; music theory and ear training do not reach the level of popularity among self-taught users. Furthermore, commercial platforms are limited in that they do not offer the flexibility to adapt content to the different curricula often prescribed by state educational agencies. The motivation behind developing the Troubadour learning platform lies in its accessibility, presented in the form of a freely available web and mobile application, as well as the availability of the source code. For music-related training, the platform offers an accessible tool for music training using automated exercises that complement the range of existing learning management systems. The platform allows students to receive direct feedback on their performance and personalised, automatically generated, and graded teacher-led exercises. The platform incorporates several gamification elements to increase student motivation, such as direct feedback, scores, levels, leaderboards, avatars, and badges, while also enabling teachers to edit and modify automatically generated exercises and track student progress. In the last three years since its launch, the platform has undergone several evaluations, and the results showed a significant increase in performance even in conventional learning tests in several test groups that utilised the Troubadour platform, compared to control groups. Longitudinal studies have also explored the use of the Troubadour platform as a distance learning tool during the Covid-19 pandemic. This year, we upgraded the platform to version 2.0 and released mobile applications for the iOS and Android platforms. Troubadour now features seven different educational games, including rhythmic, interval, and harmonic dictation designed for primary and secondary schools. In the latest version, inverse interval and harmonic dictation games have been added, allowing users to sing a written note sequence, with the mobile device reading out the tones' height and automatically evaluating correctness, displaying results directly to the user.

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