



SIRIKT2010

IZBOR ORODJA ZA ZAČETNO UČENJE PROGRAMIRANJA

SELECTION OF LEARNING TOOL FOR INTRODUCTORY PROGRAMMING LEARNING

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Povzetek

V prispevku bomo obravnavali učne programske jezike in orodja za učenje programiranja. Osredotočili se bomo na tiste, ki so namenjeni začetnikom, in izmed njih predstavili orodja Alice, CeeBot, Logo, Scratch in Stagecast Creator.

CeeBot in Logo spadata med tekstovne, ostali pa med vedno bolj priljubljene vizualne programske jezike. Vizualni programski jeziki pripomorejo k lažjemu in hitrejšemu učenju osnovnih konceptov programiranja, saj uporabnik manipulira s konkretnimi objekti, kar naredi računalniško programiranje bolj razumljivo.

Zgoraj omenjena orodja so primeri uspešnih učnih programskih orodij, saj so preprosta za uporabo, tako da lahko uporabnik brez izkušenj iz programiranja v zelo kratkem času ustvari zanimive animacije, igre ipd. Vsebujejo uporabniku prijazen grafični uporabniški vmesnik, ki omogoča enostavno pisanje programske kode oz. omogoča celo delo brez sintaktičnih napak ter sprotno preverjanje napak. Uporabnik se z njimi nauči osnovnih konceptov programiranja ter pomembnega algoritmičnega mišljenja. Za tiste, ki bi želeli poglobiti svoje znanje programiranja, pa bo olajšan tudi kasnejši prehod na tradicionalne programske jezike.

Abstract



In this paper we deal with educational programming languages and tools that are designed for the learning of programming. We have focused on those that are designed for beginners and among them we chose Alice , CeeBot, Logo, Scratch, and Stagecast Creator.

CeeBot and Logo belong to textual programming languages, while others belong to more popular visual programming languages. Such languages enable easier and faster learning of introductory programming concepts since the user manipulates actual objects, which makes computer programming more understandable.

These tools are examples of successful learning programming tools since they are easy to use so that beginners are able to create simple but interesting animations, games, etc. They have a user friendly GUI that enables easy writing of program code or even working without any syntactical faults. They help the user to learn the introductory programming concepts and the algorithmic way of thinking. For those wanting to expand their knowledge of programming the later transition to traditional program languages will be easier.