Model Driven Engineering: Automatic Code Generation of Android from UMPLE

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Nowadays, the significance of automated generation of object-oriented code from design models has increased due to its benefits, such as, cost reduction and time efficiency. This paper proposed a code generator for automatic generation of android source code from UMPLE. UMPLE stands for UML Programming Language and it is text-based model oriented program. Code generation can be defined as the technique in which we write program that create another programs. The proposed code generator is based on abstract syntax tree (AST) visitor based approach. The main results of code generator are Java class for model layer, XML file for view layer and android activity class for controller layer. The results show that the proposed code generator significantly reduces the cost and time efficiently.