A MODEL-DRIVEN APPROACH TO GRAPHICAL USER INTERFACE ADAPTATION

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MODELS@ RUN.TIME

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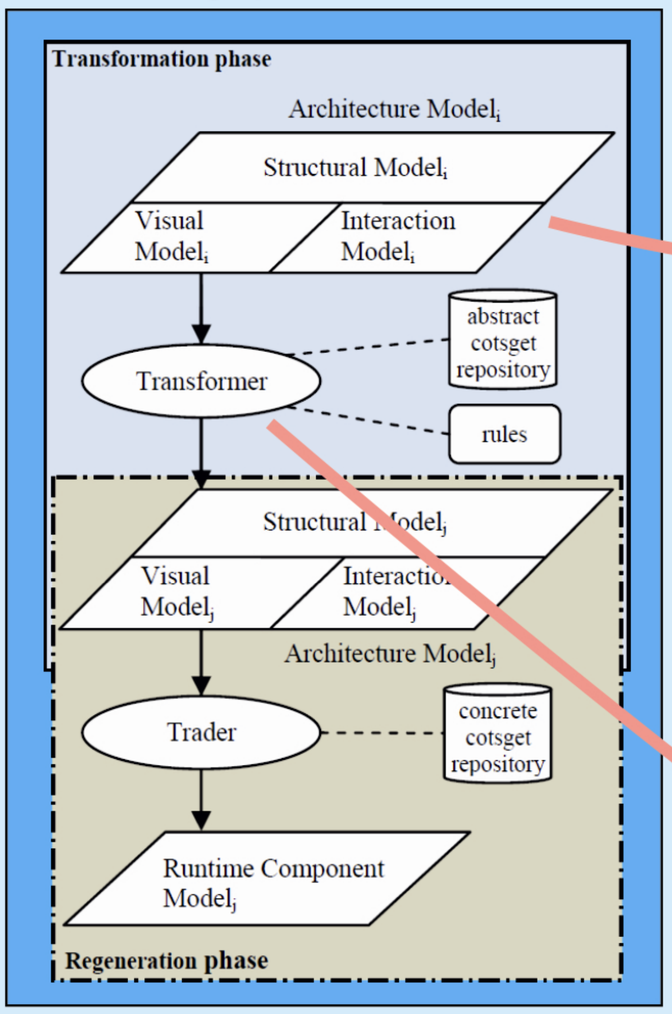
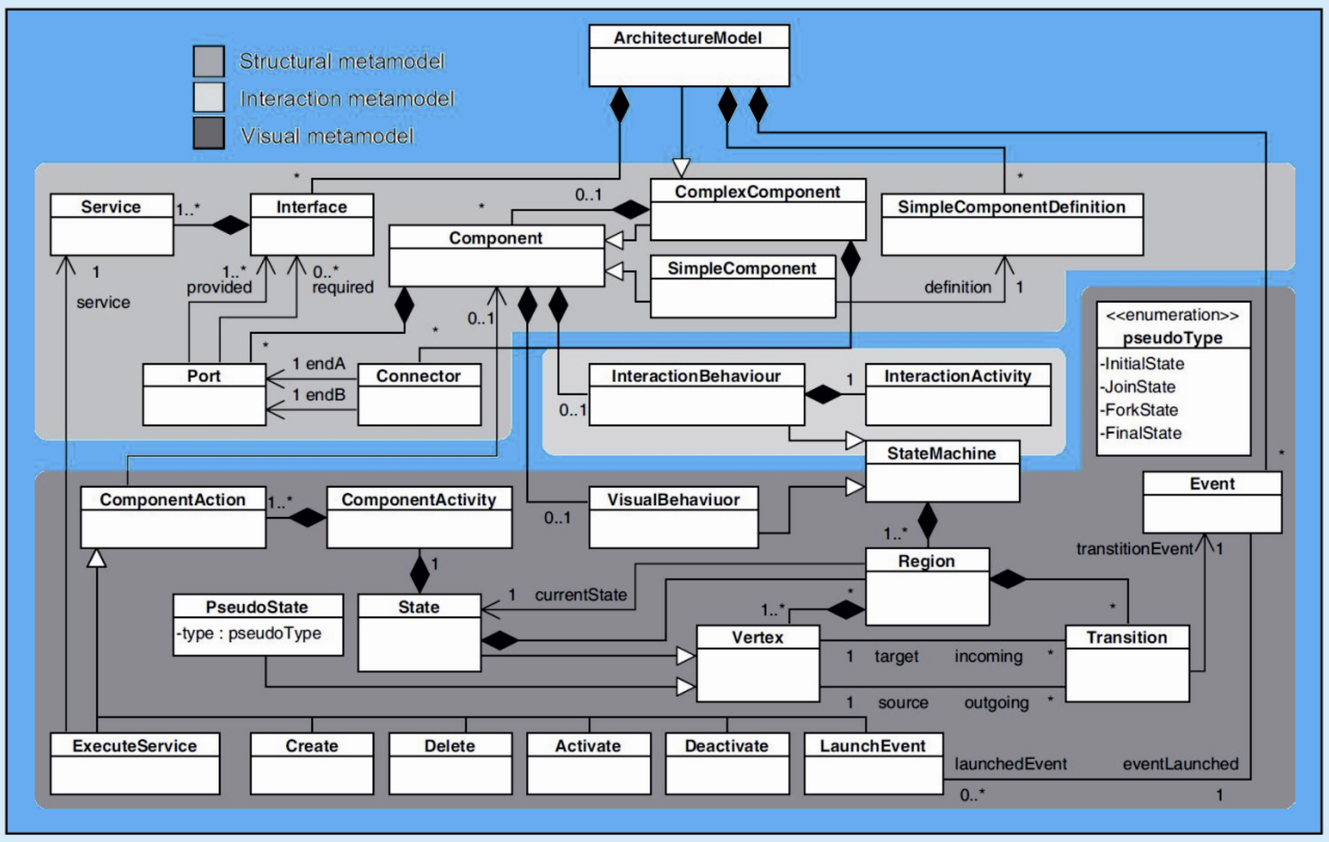
User interface architectures are considered as models capable of evolving at runtime in a **two-stage process**.

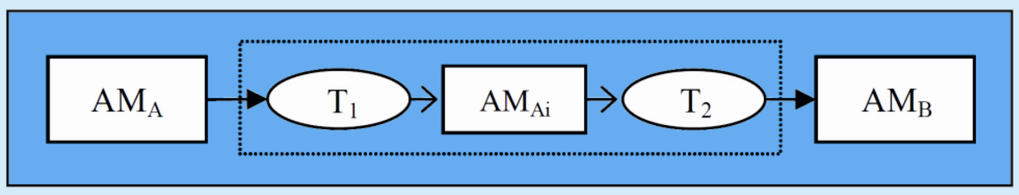


A piece of the **architecture meta-model** showing the main concepts included in the structural and the visual subsets.



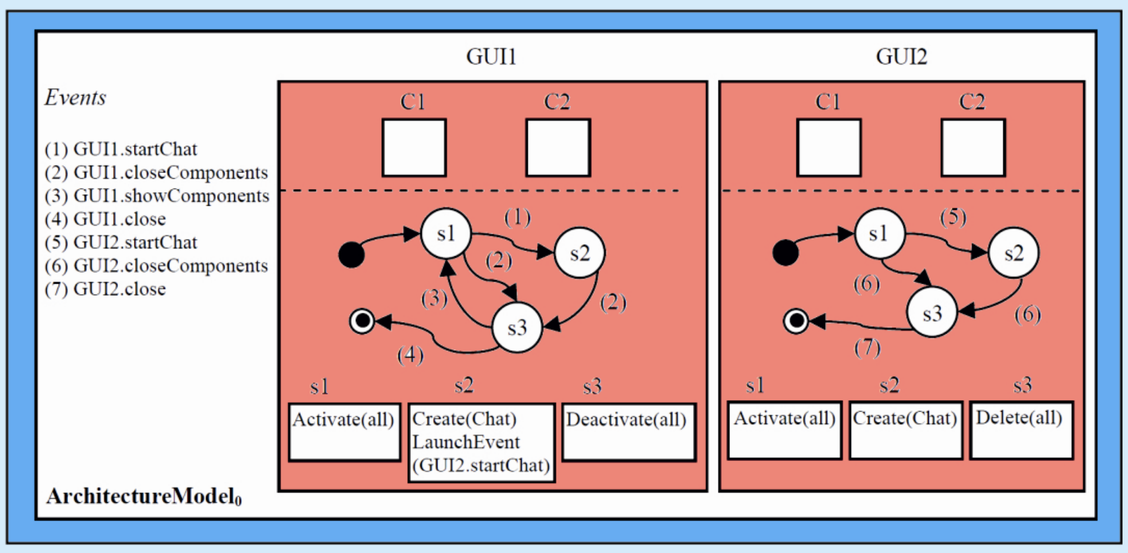
The runtime adaptation has been implemented by means of a **model-to-model transformation** which has two steps:

- **T1**: All the state machines affected by the collected event are updated.
- **T2**: It executes the *ComponentActions* contained in all the updated *currentStates*.

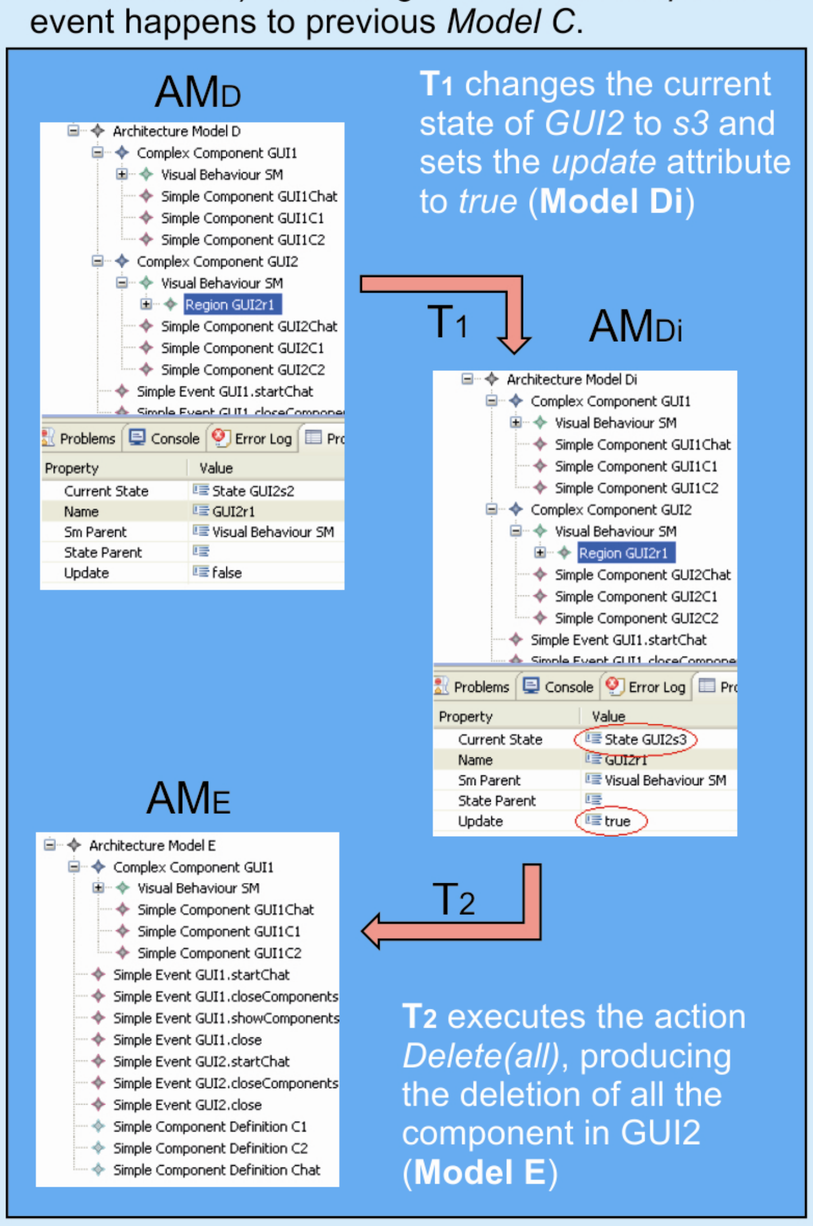


The example shows an **initial user interface architecture model** composed by two GUIs.

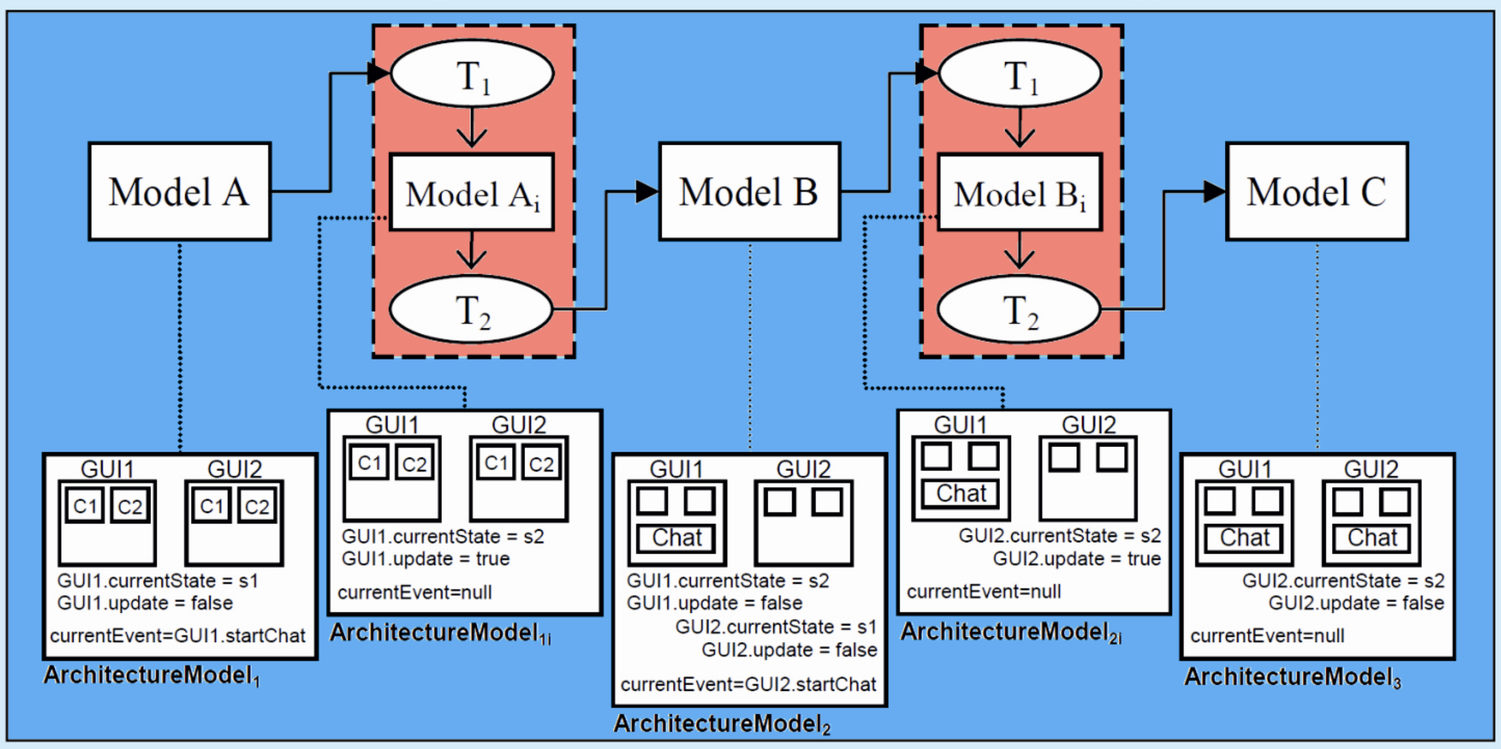
We can observe the **state machine** and the **component actions** related with each GUI.



Another model adaptation example (**tree editor visualization**) simulating *GUI2.closeComponent* event happens to previous *Model C*.



Model transformation steps executed after the *GUI1.statChat* event happens.



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