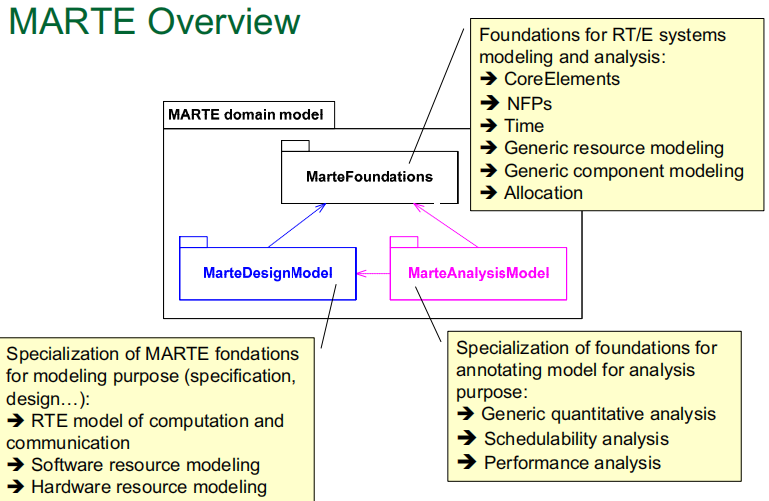
# 杨智茹个人第五次作业

MARTE

A Standard for Modeling and Analysis of Real-Time and Embedded Systems including its software and hardware aspects.

* The Proposals will define a metamodel and its underlying UML profile.
* It shall be possible to use independently software and hardware parts of the profile.



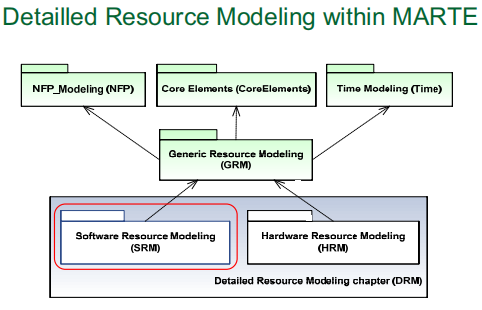
图一 MARTE Overview

GRM

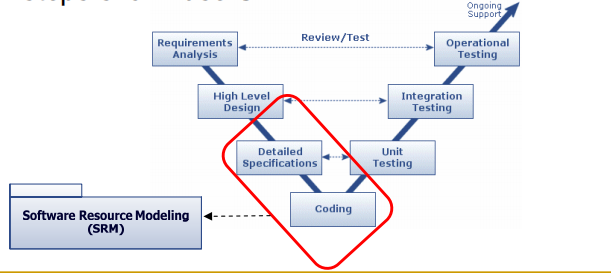
* Provides basic concepts for modeling a general (high-level) platform for processing RTE applications
* Includes the features for modeling processing platforms at different level of details.
* Build in a bottom-up process to abstract finer-level platforms

A UML profile for modeling APIs of RT/E sw execution supports

BUT it is NOT a new API standard dedicated to the RT/E domain!



图二 MARTE/DRM



图三 MARTE/SRM

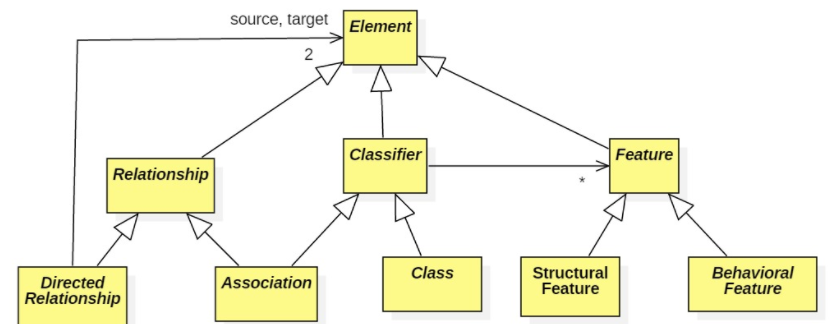
HRM is a detailed HW architecture design language

Level of details depends on the description accuracy

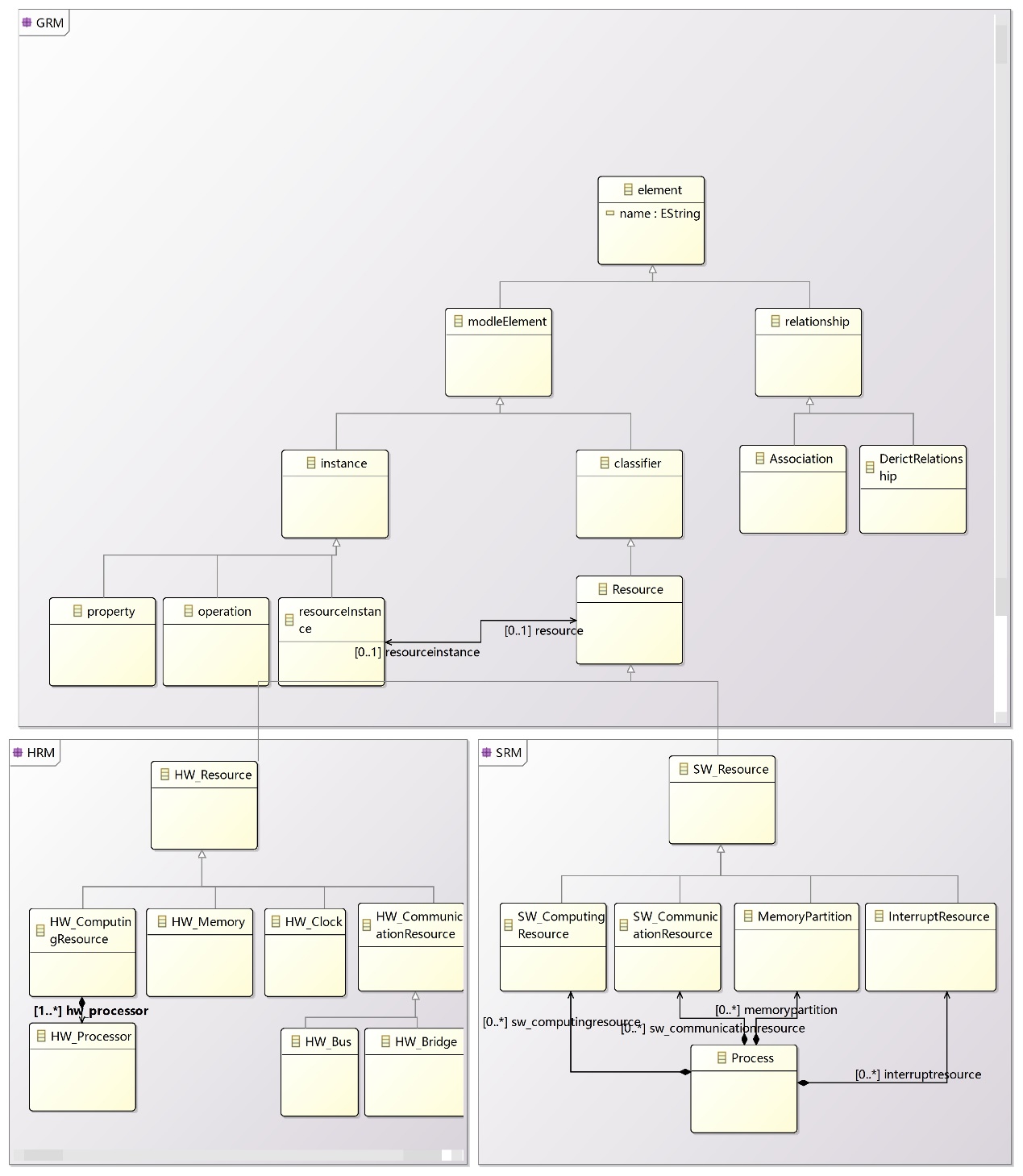
* Ex1: Functional simulator of a processor only requires its instruction set family
* Ex2: Performance simulation need a fine description of processors micro-architecture.

目标元模型

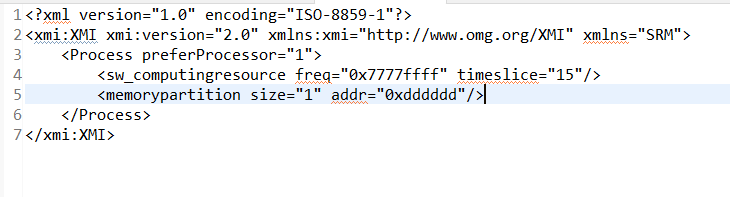
（元模型说明）



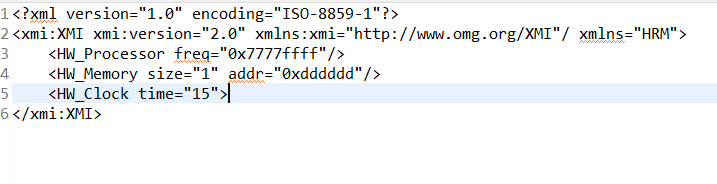
图四 参考uml元模型



图五 目标原模型



图六 目标模型



图七 输出模型