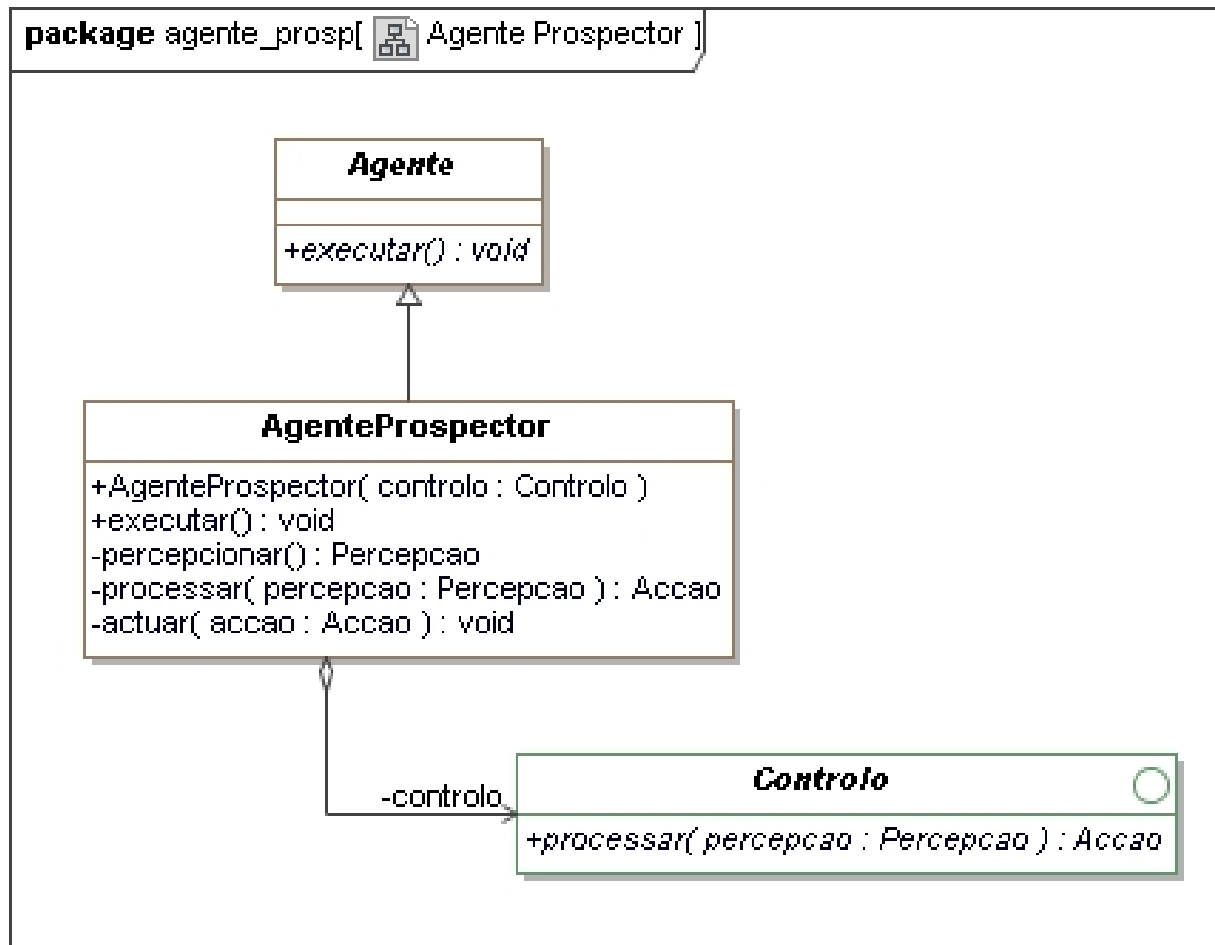
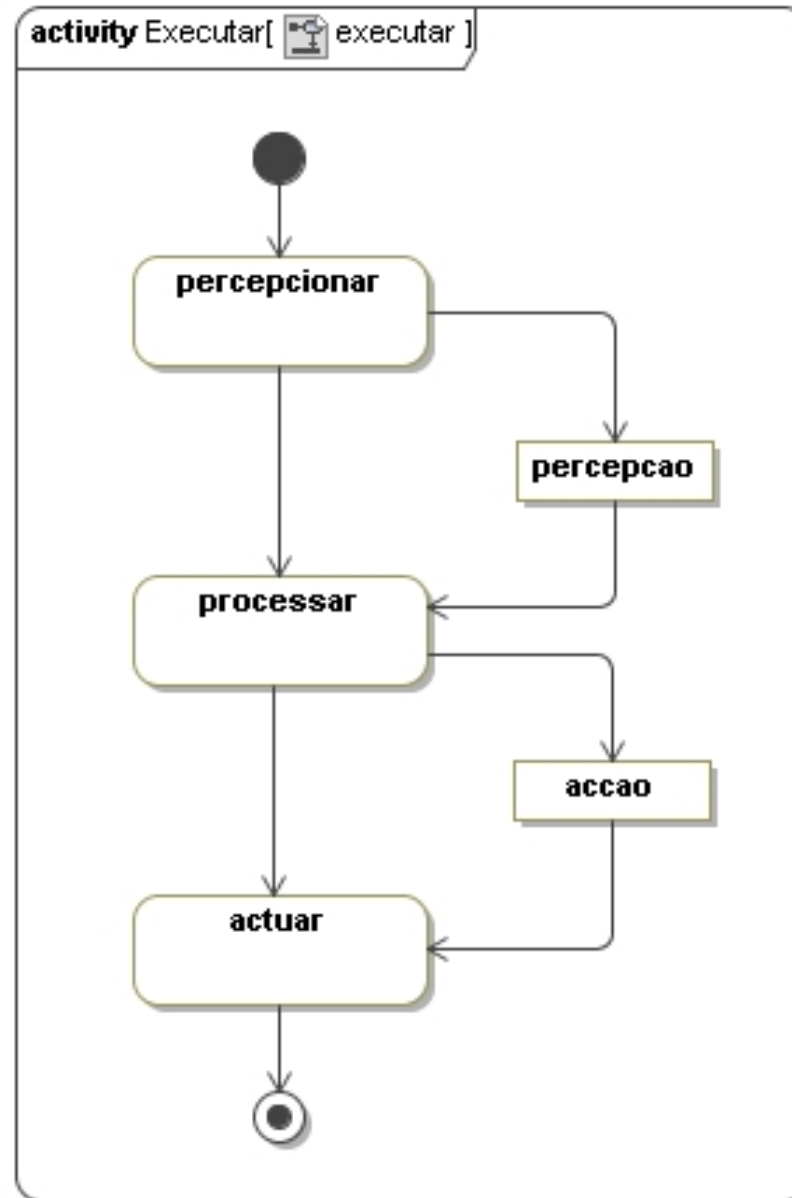


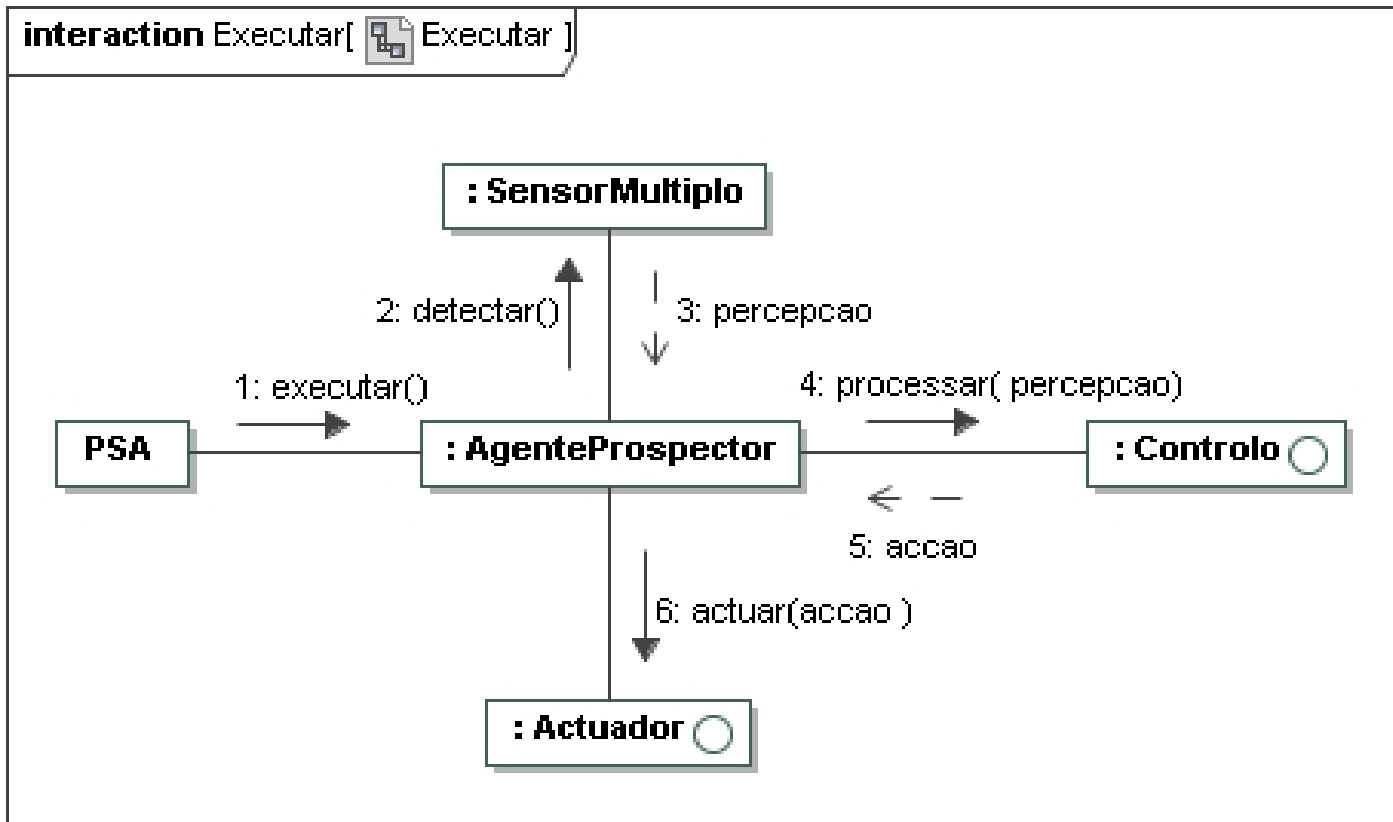
# AGENTE PROSPECTOR



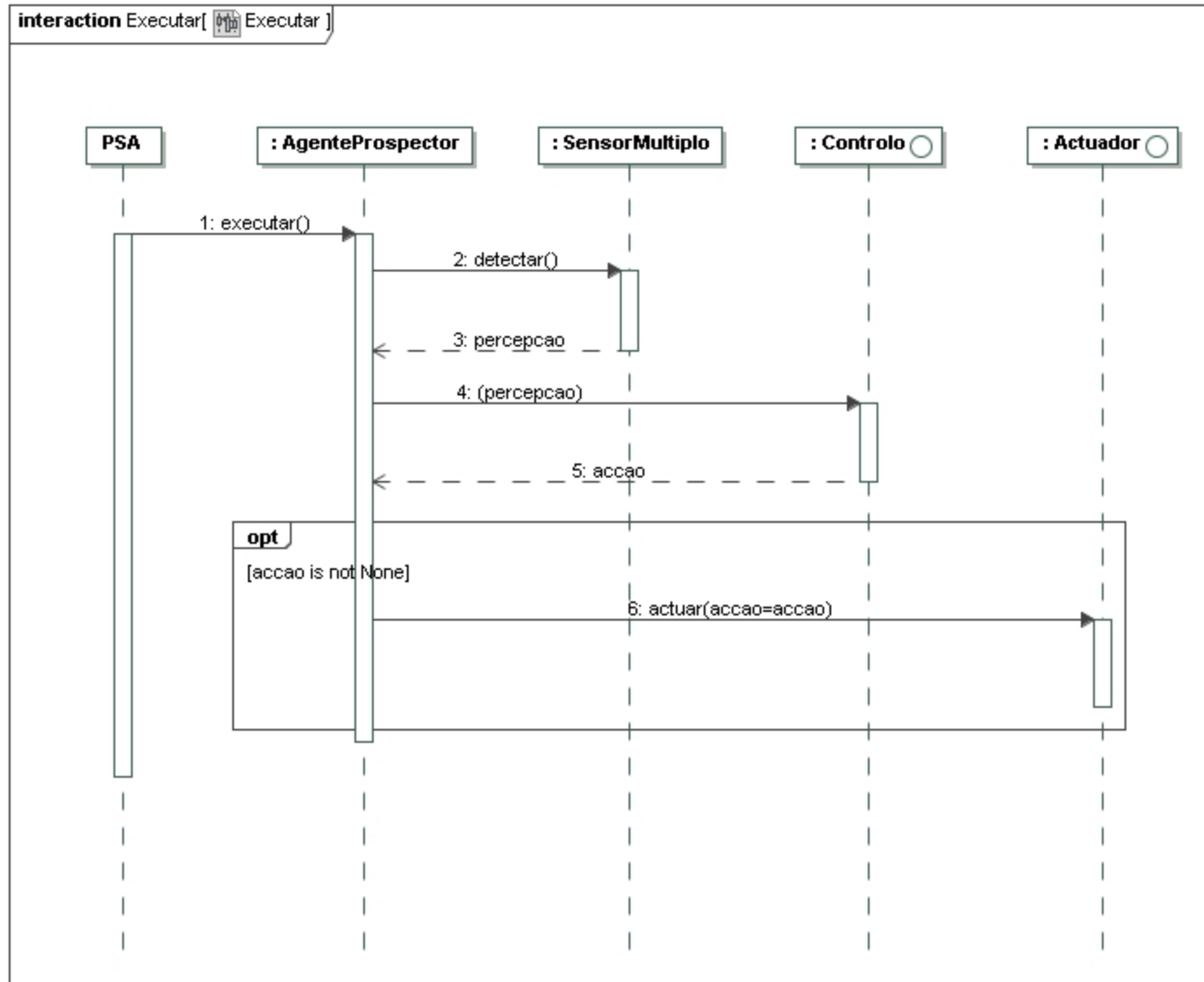
# AGENTE PROSPECTOR: EXECUTAR



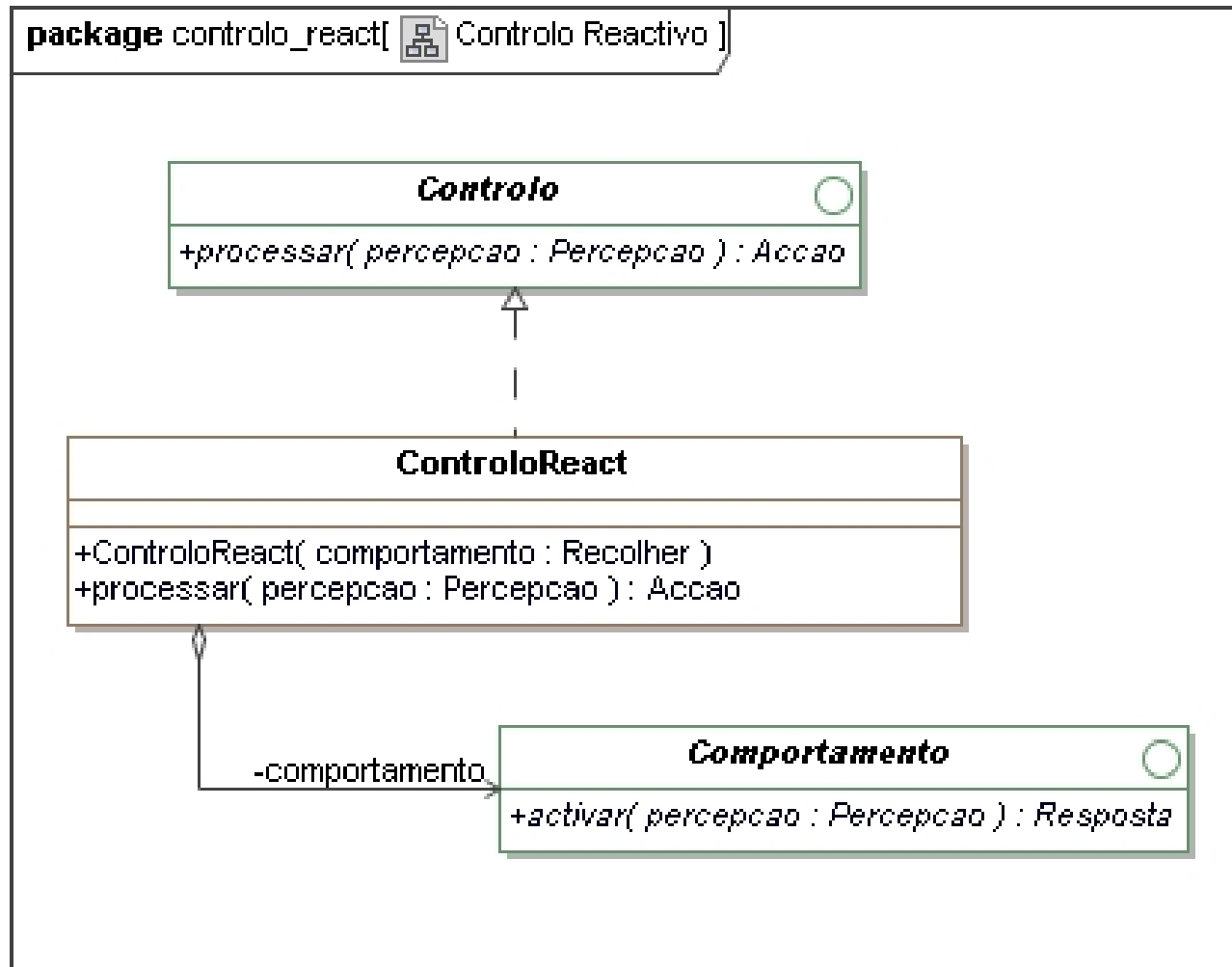
# AGENTE PROSPECTOR: EXECUTAR



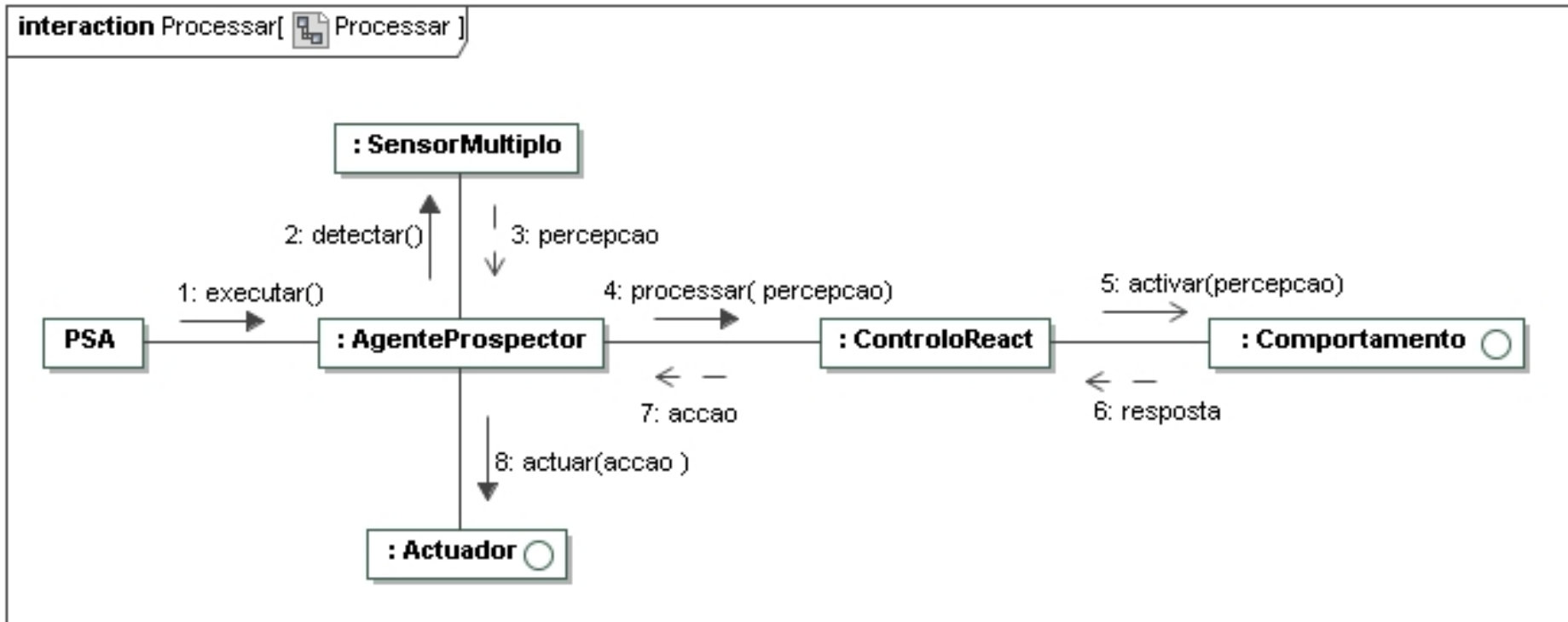
# AGENTE PROSPECTOR: EXECUTAR



# CONTROLO REACTIVO

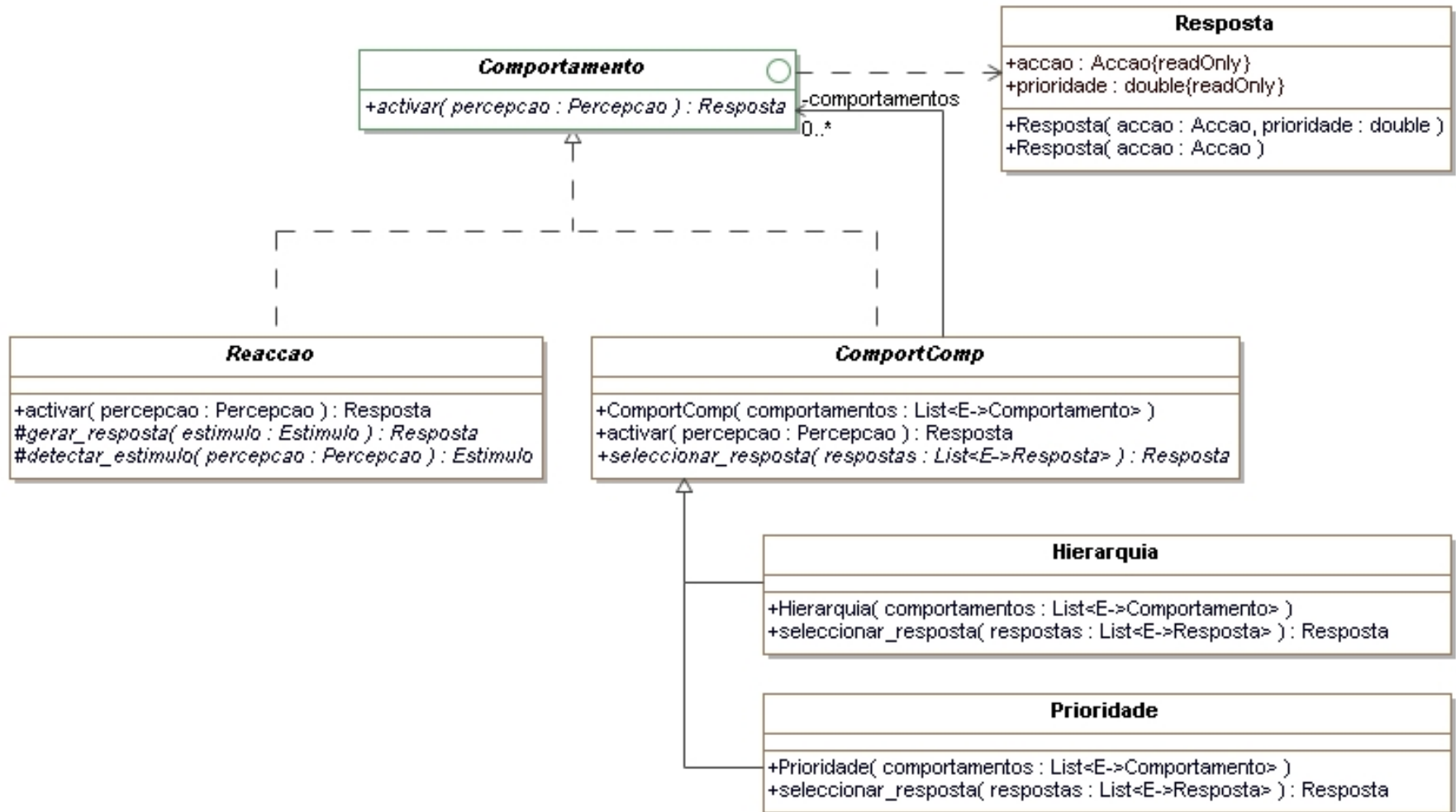


# CONTROLO REACTIVO: PROCESSAR

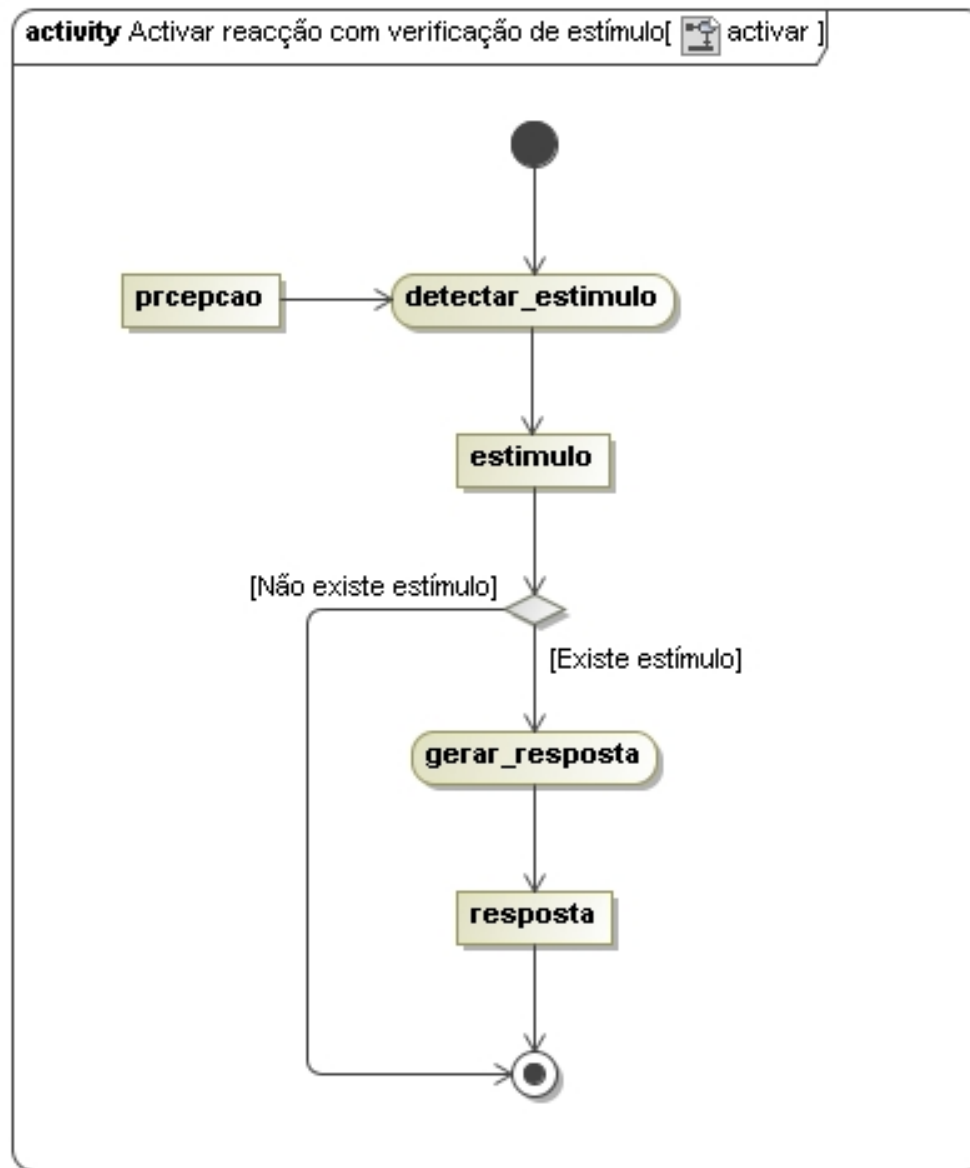


# ESQUEMAS COMPORTAMENTAIS REACTIVOS

package ecr[ Esquemas comportamentais ]



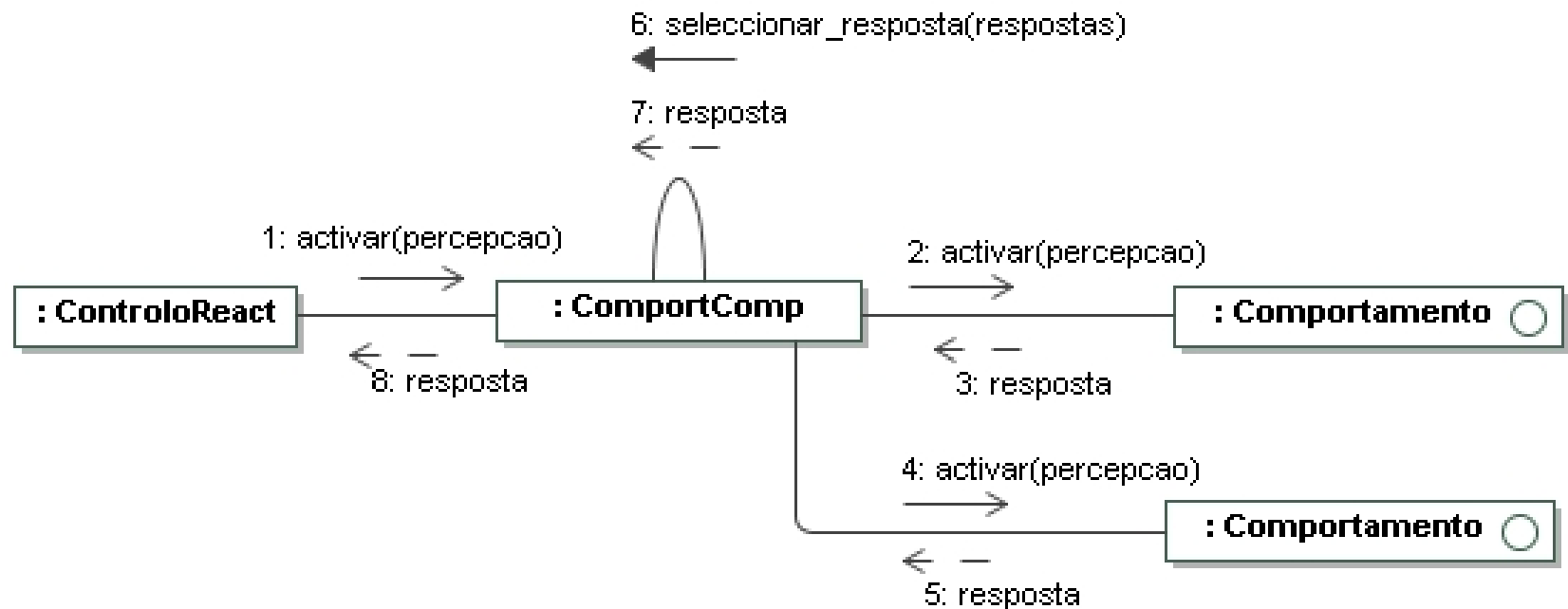
# ACTIVAR REACÇÃO



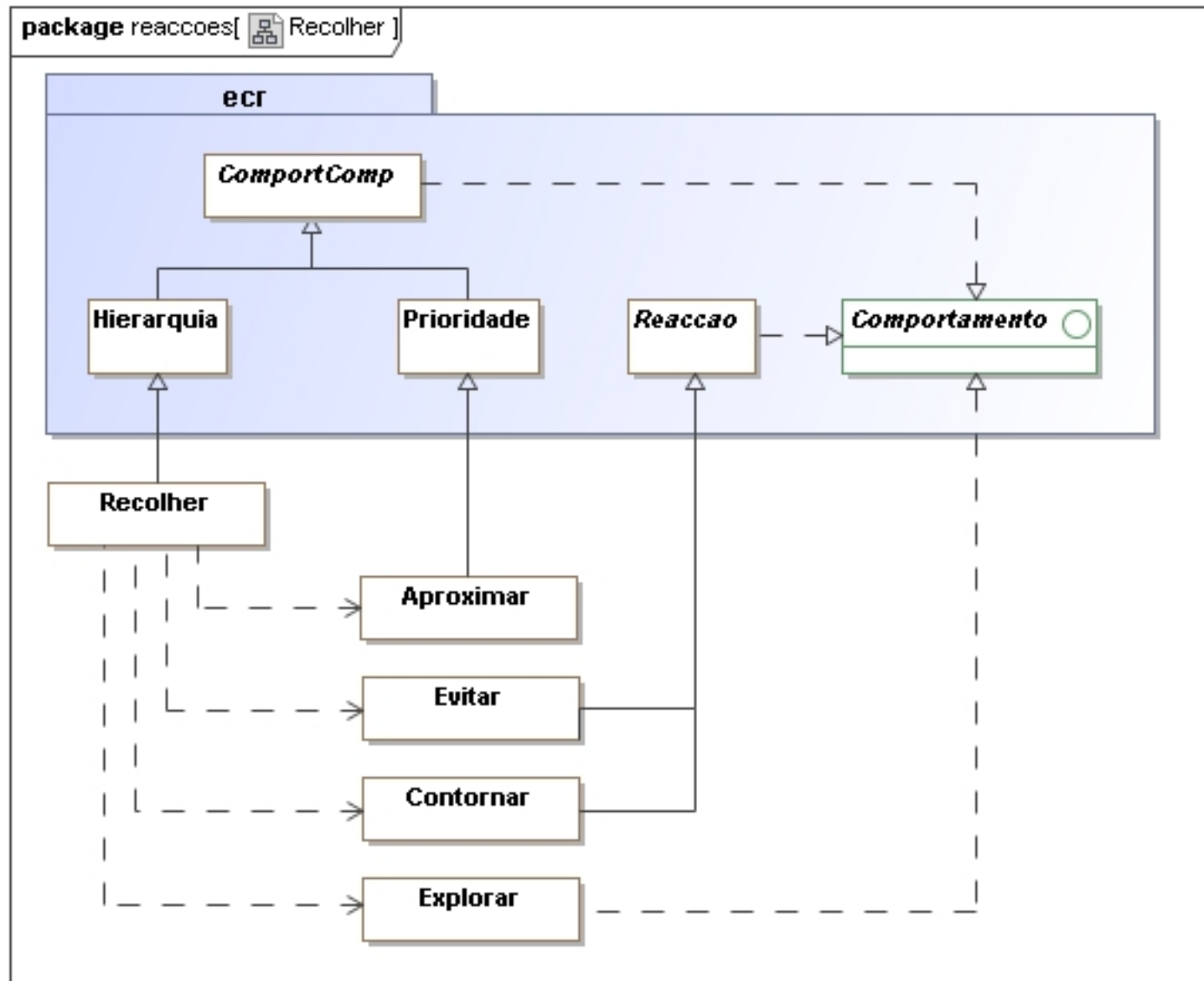


# ACTIVAR COMPORTAMIENTO COMPOSTO

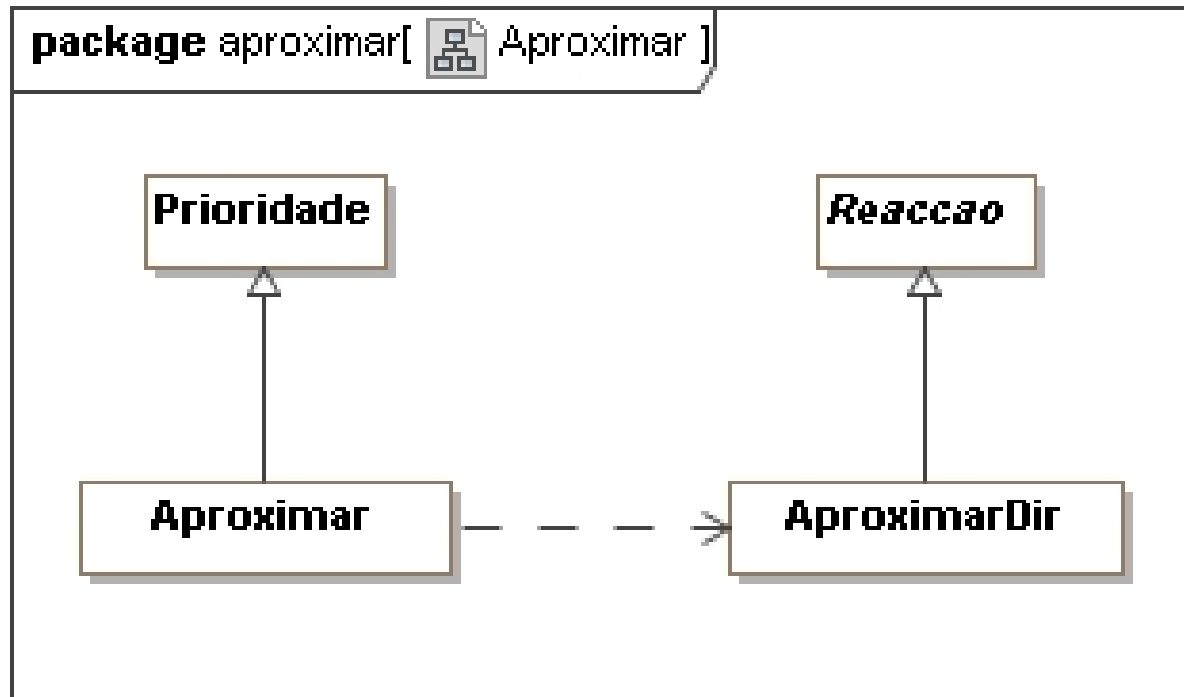
**interaction** Activar comportamiento composto[  activar ]



# CONTROLO REACTIVO: REACÇÕES

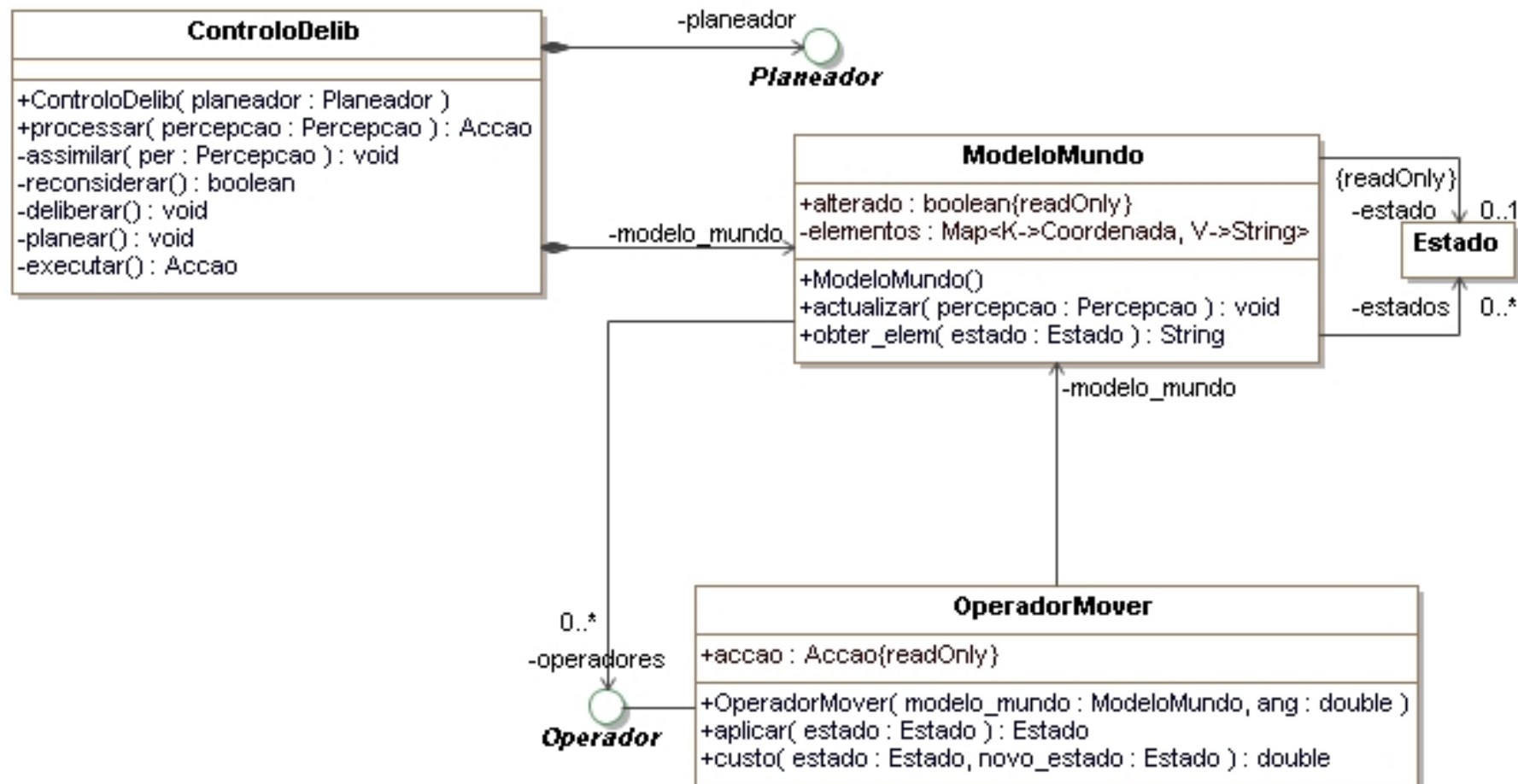


# CONTROLO REACTIVO: APROXIMAR

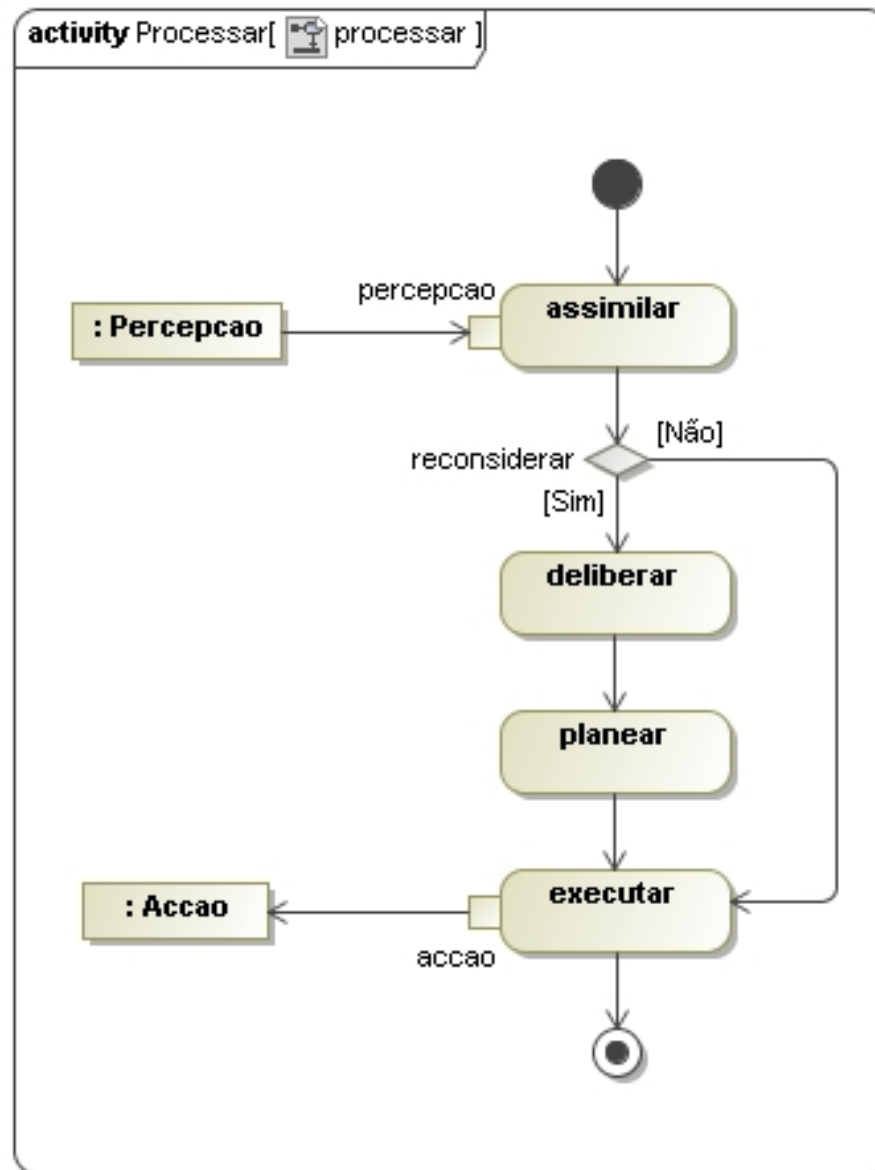


# CONTROLO DELIBERATIVO


package controlo\_delib[  Controlo deliberativo ]

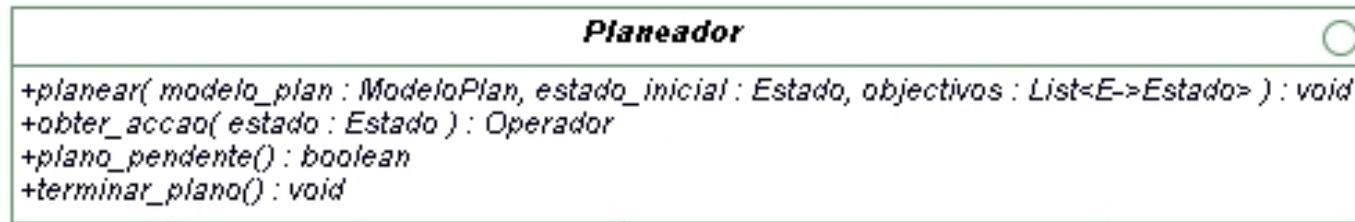


# CONTROLO DELIBERATIVO: PROCESSAR



# PLANEAMENTO AUTOMÁTICO

package plan[  Planeador ]



plan\_pdm

plan\_pee

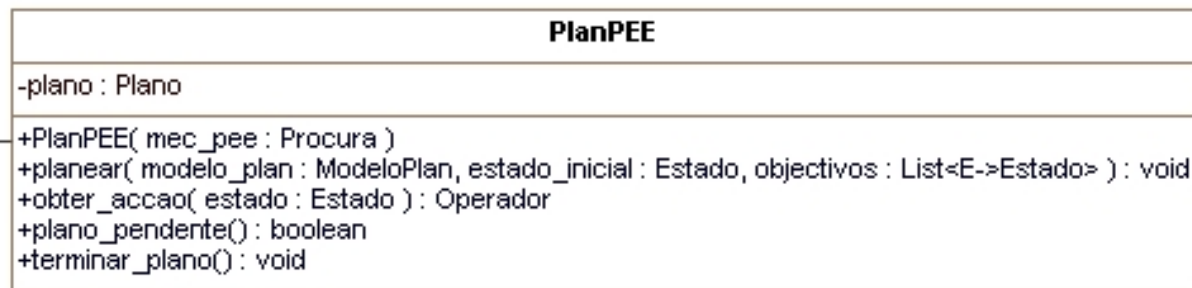
**ModeloPlan**

+estados() : List<E->Estado  
+operadores() : List<E->Operador

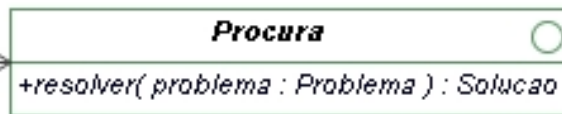
# PLANEADOR COM BASE EM PEE

package plan\_pee[  Planeador PEE ]

**Planeador**



-mec\_pee



**ProblemaHeur**

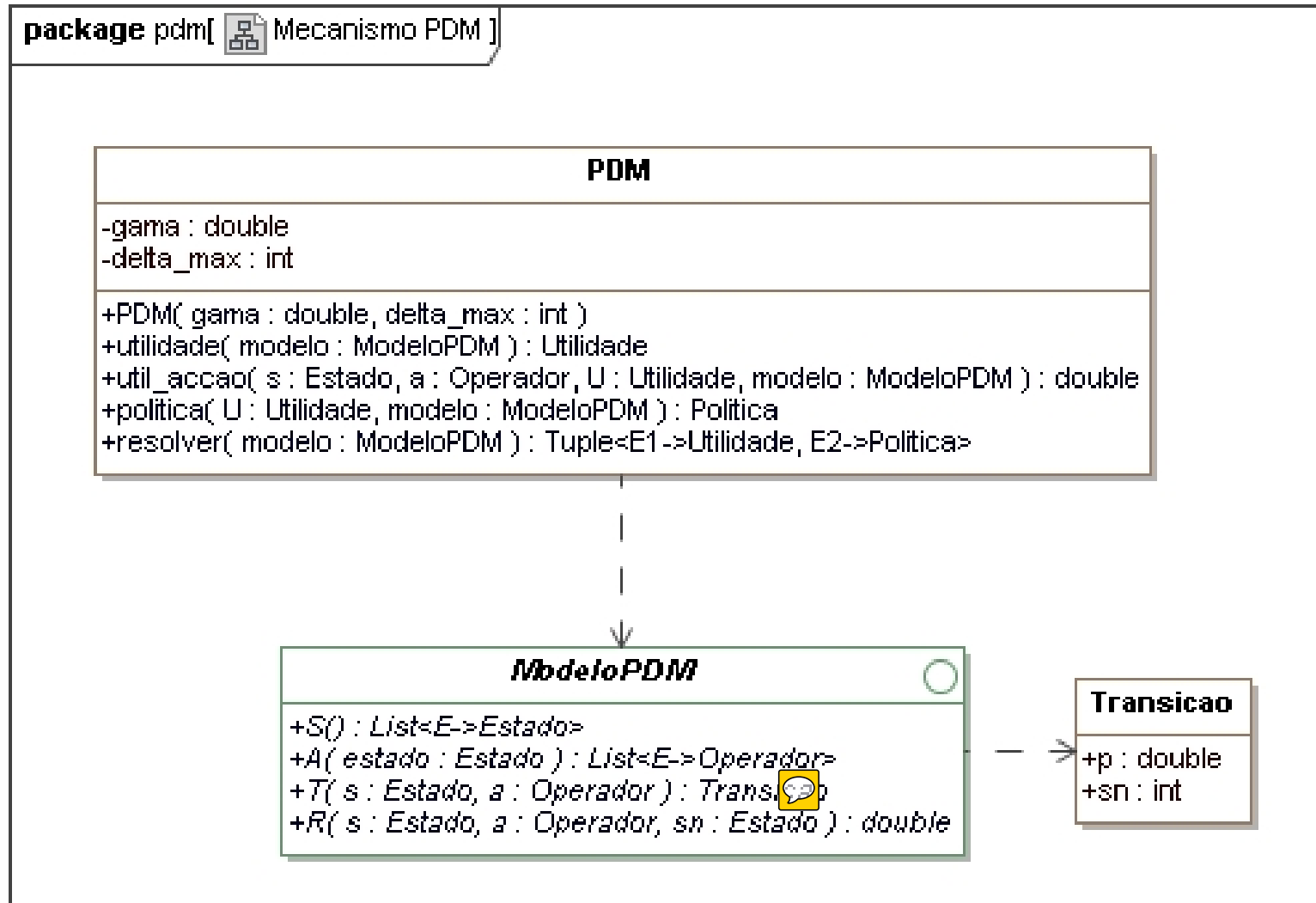
**ProblemaPlan**

+ProblemaPlan( estado\_inicial : Estado, estado\_final : Estado, operadores : List<E->Operador )  
+objectivo( estado : Estado ) : boolean  
+heuristica( estado : Estado ) : double

-estado\_final

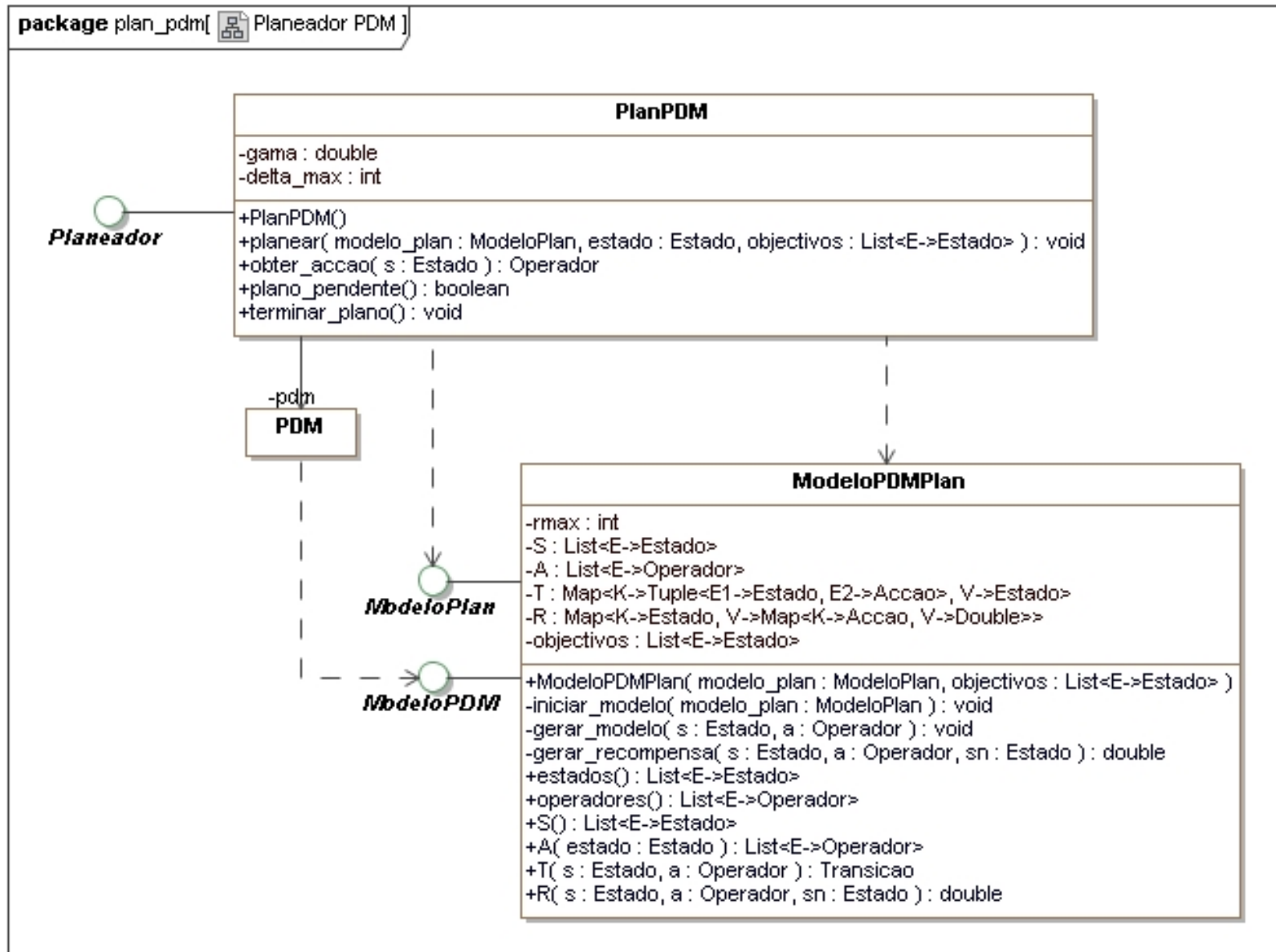
**Estado**

# PROCESSOS DE DECISÃO DE MARKOV



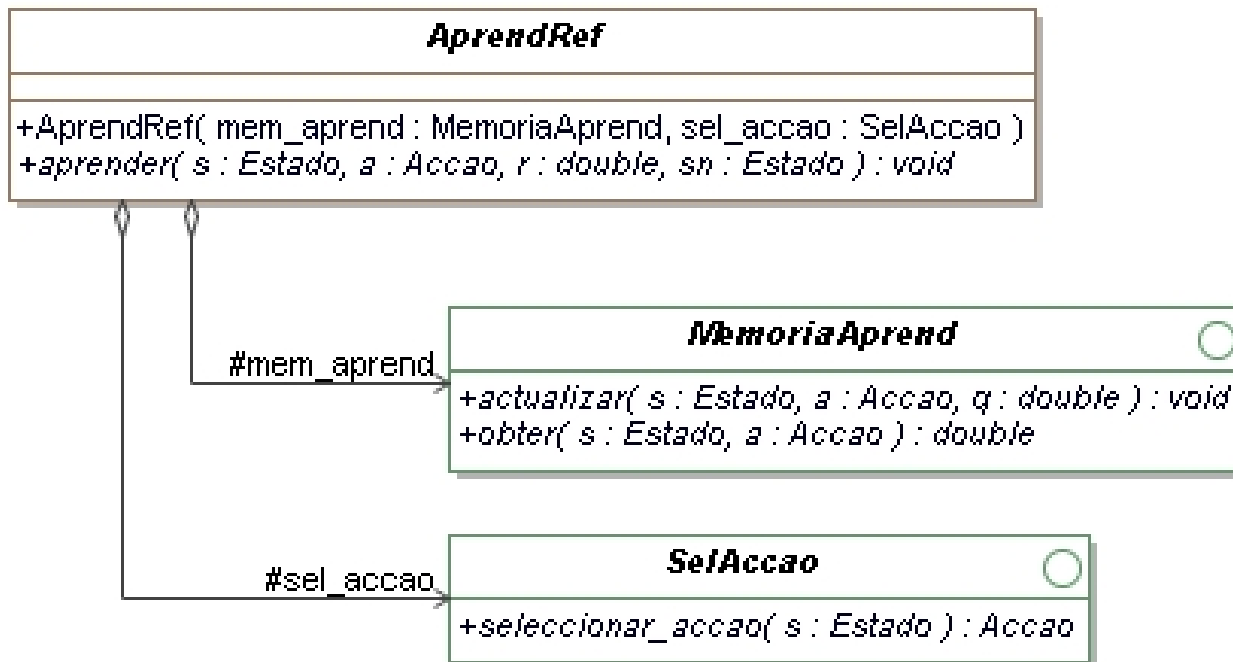


# PLANEADOR COM BASE EM PDM

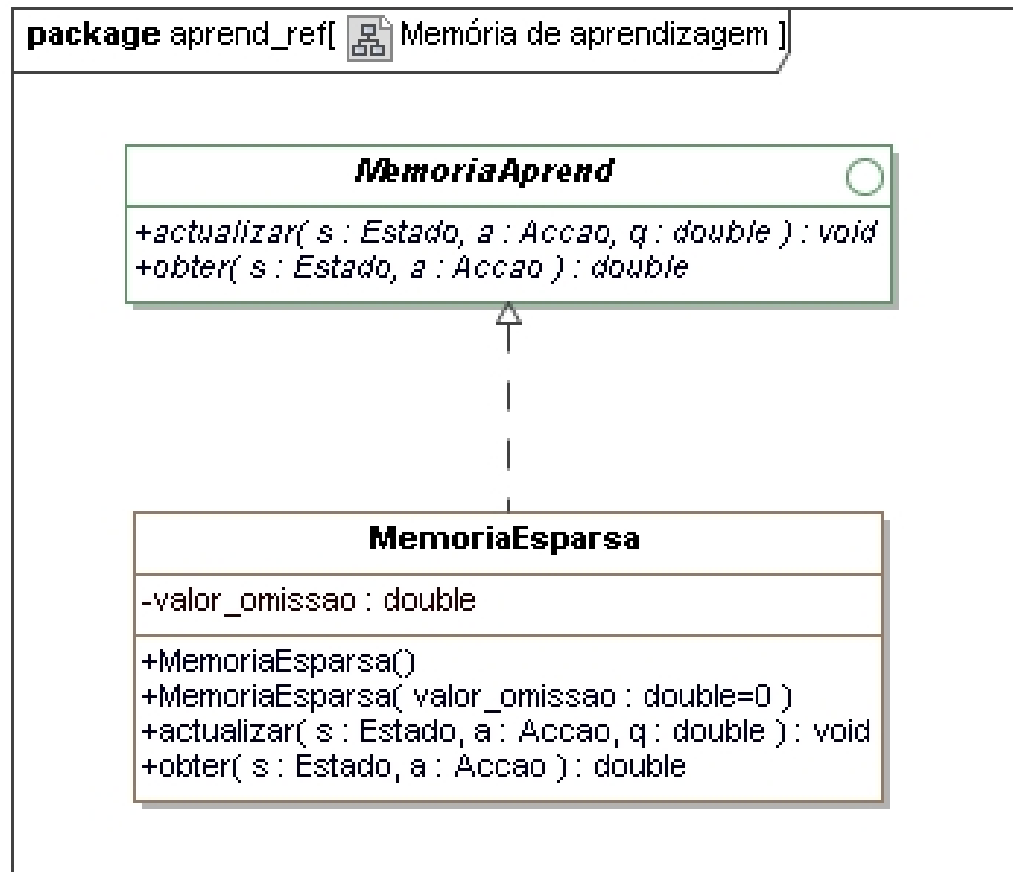


# APRENDIZAGEM POR REFORÇO

**package** aprend\_ref[  Mecanismo geral de aprendizagem por reforço ]

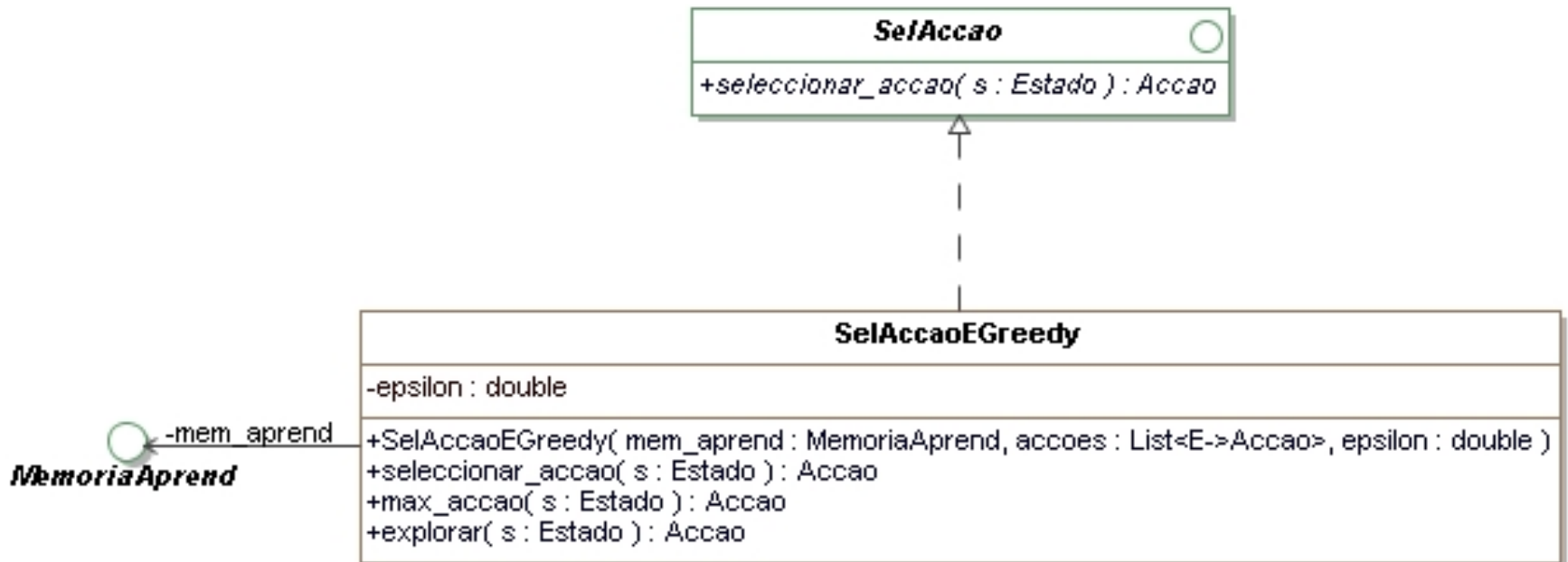


# MEMÓRIA DE APRENDIZAGEM



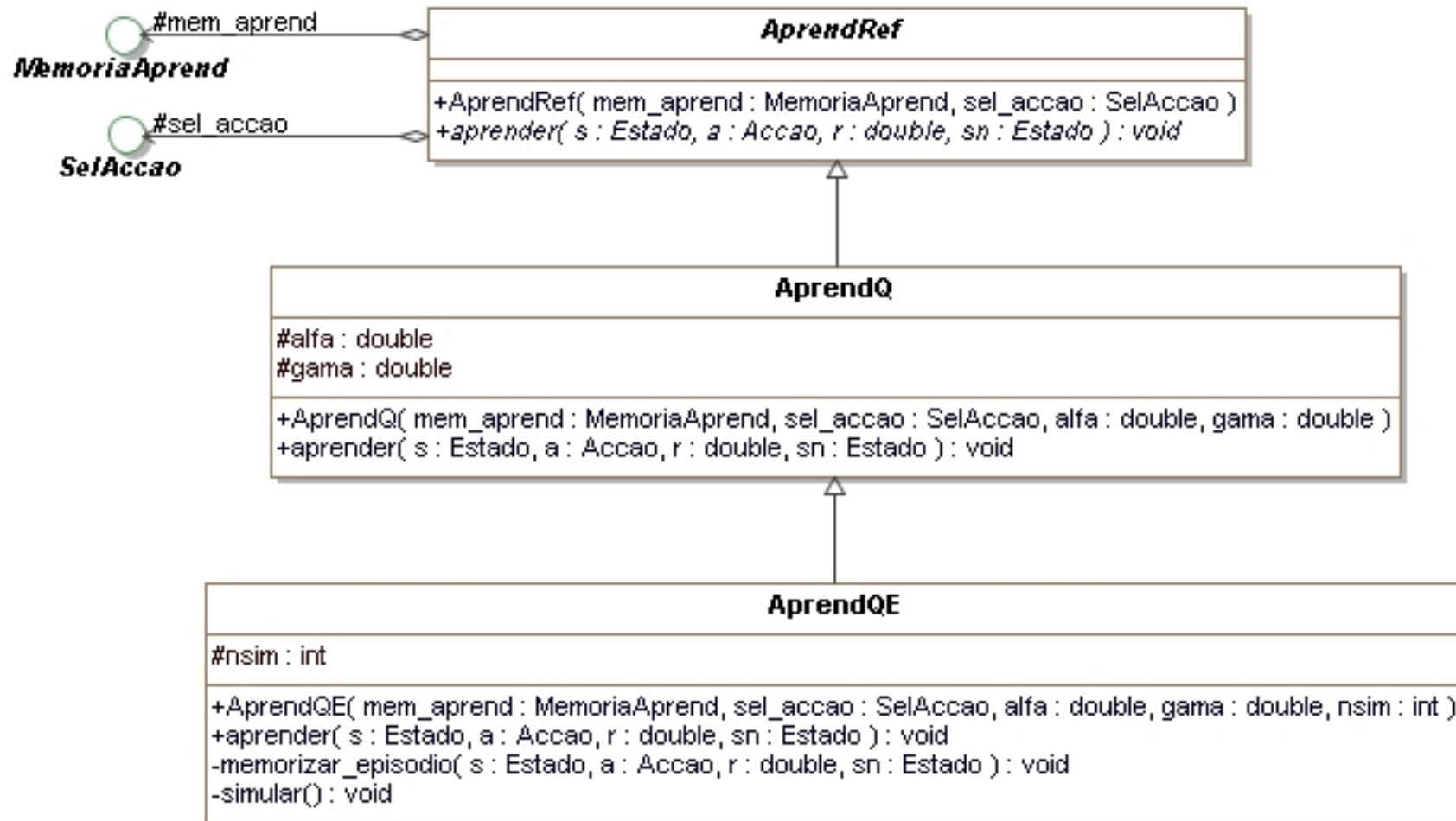
# SELECÇÃO DE ACÇÃO

package aprend\_ref[  Mecanismos de selecção de acção ]

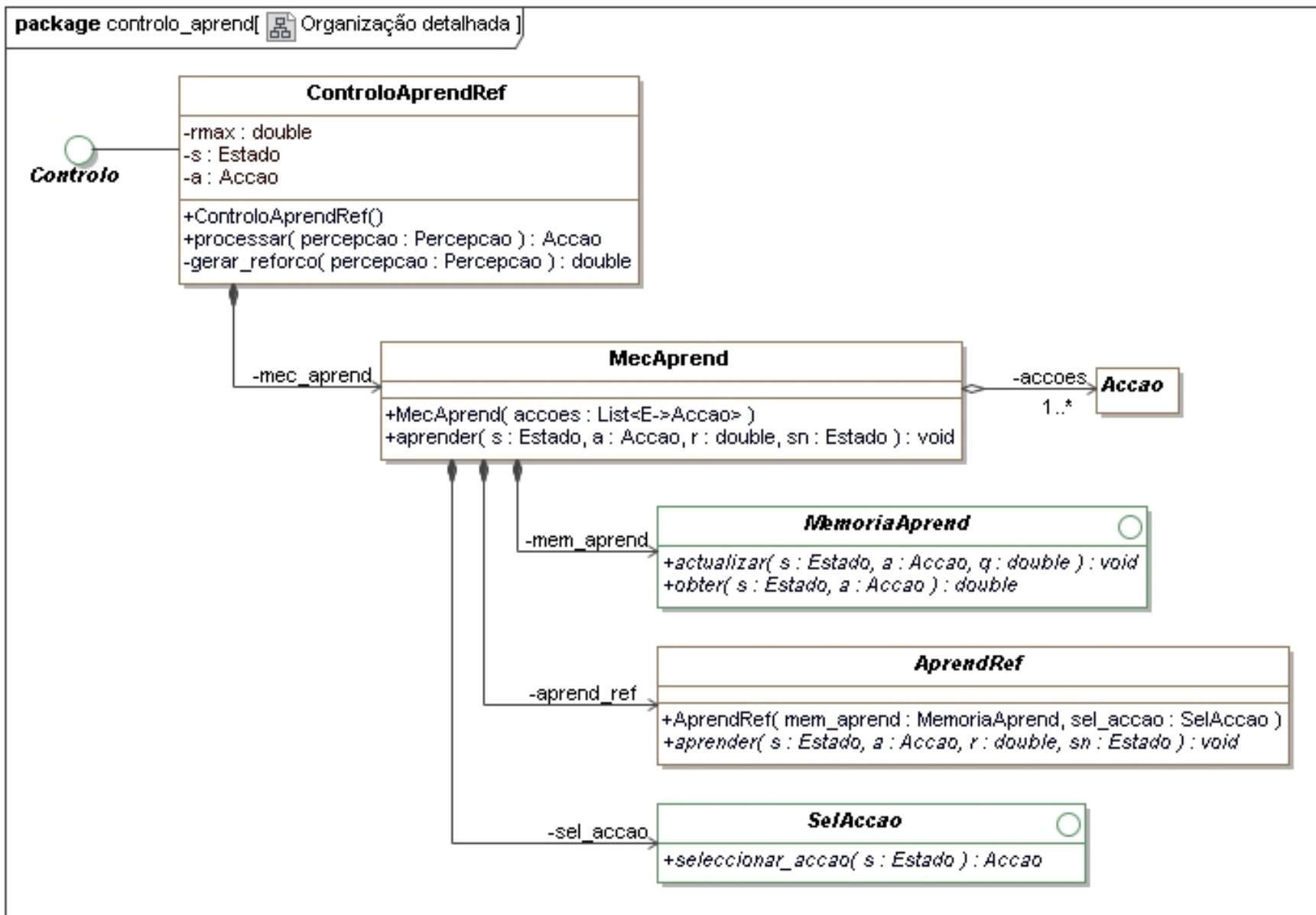


# MECANISMOS DE APRENDIZAGEM

**package** aprend\_ref[ Mecanismos de aprendizagem por reforço ]



# CONTROLO COM APRENDIZAGEM POR REFORÇO



# CONTROLO COM APRENDIZAGEM POR REFORÇO

