

Ingineria Sistemelor de Programare

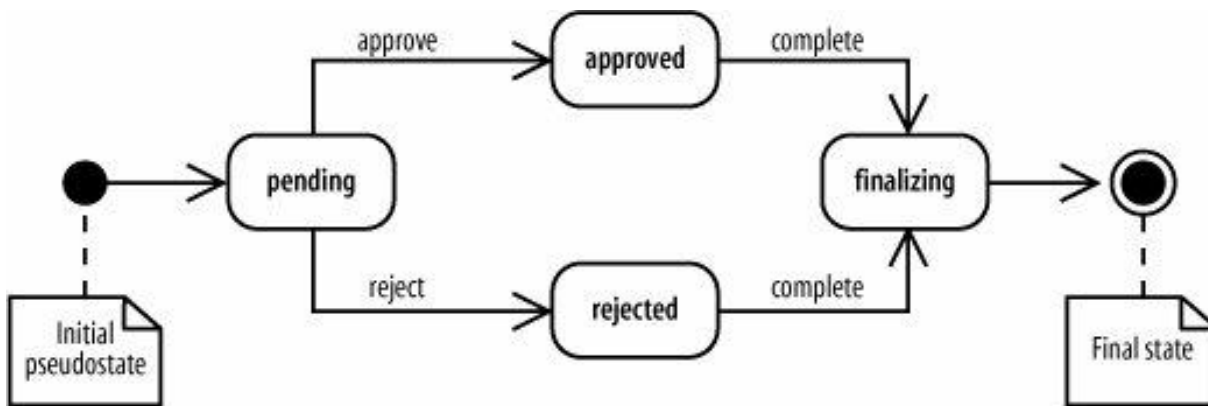
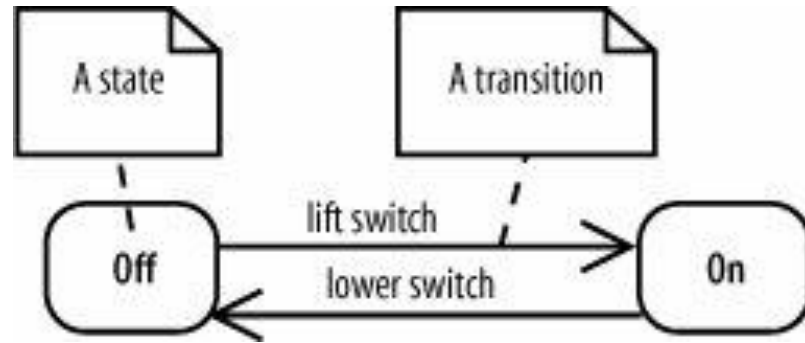
UML – State Machine Diagrams

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Principalele elemente

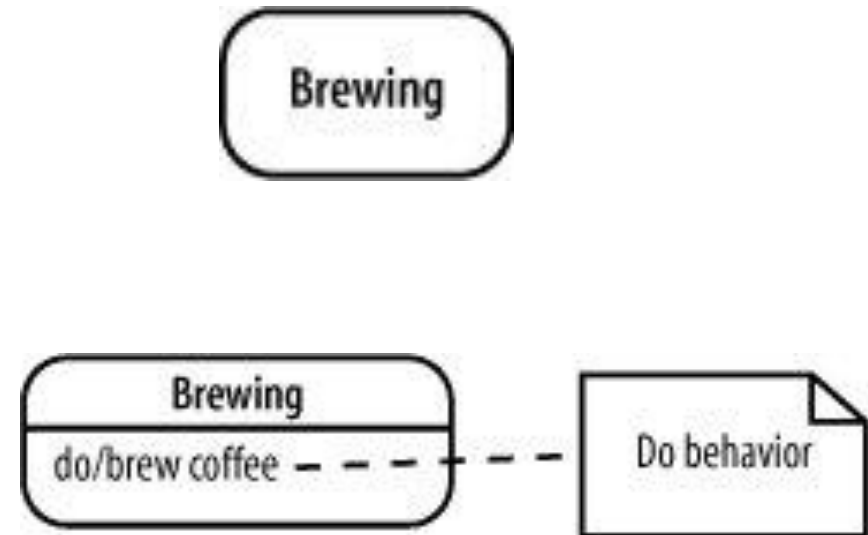
Notatiile fundamentale



- Stare
 - Stari initiale si finale
 - Activa
 - Inactiva
- Tranzitii
 - Activate de evenimente
 - Reprezinta o schimbare de stare
- Evenimente
 - Produse in sistem

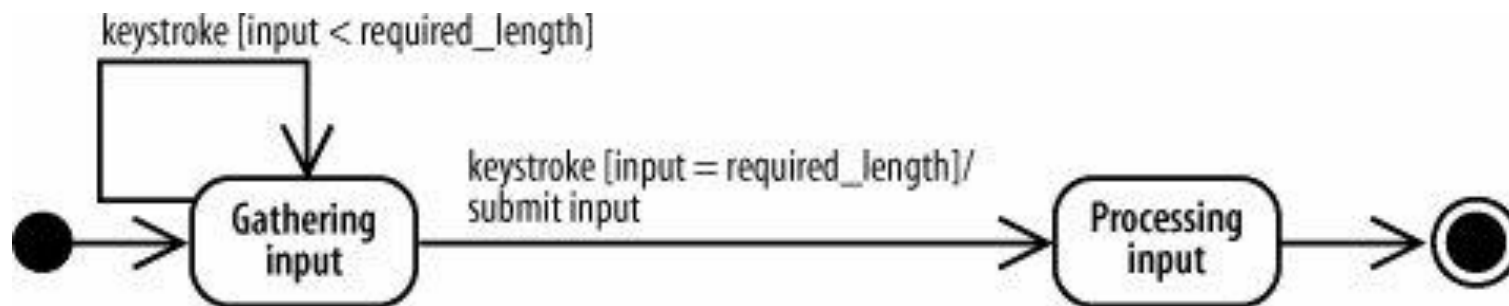
Stare

- Starea poate fi:
 - Pasiva (ex. On / Off)
 - Activa (ex. Executie actiune)

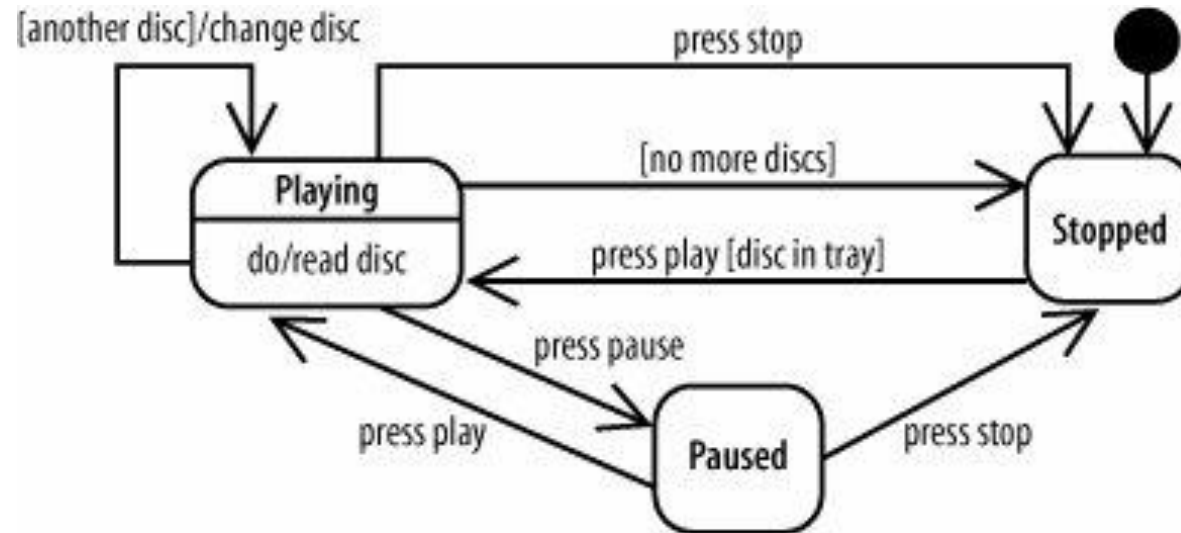


Tranzitia

- Exprima o schimbare intre stari – intre o stare sursa si o stare destinatie
- Notatie completa tranzitie: *trigger[guard] / behavior*
 - *Trigger* – eveniment care poate determina tranzitia
 - *Guard* – o conditie care permite sau nu tranzitia
 - *Behaviour* – o actiune ce este executata in procesul de tranzitie

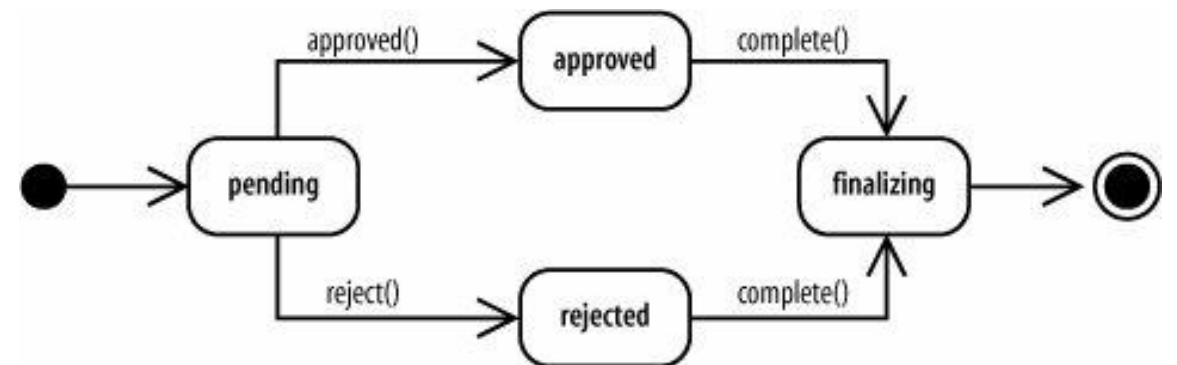


Exemplu CD Player



Exemplu Account

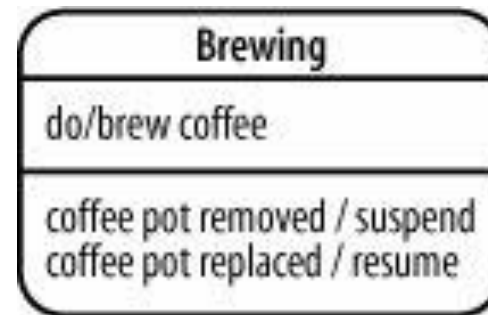
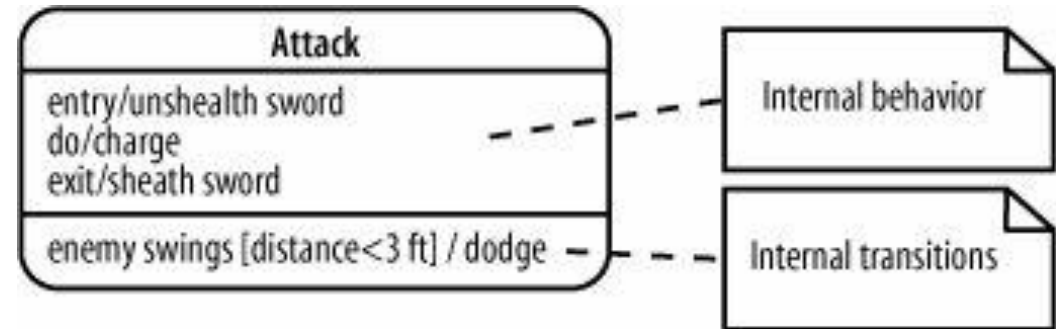
- O masina de stare poate modela ciclul de viata al unui obiect sau starile prin care un obiect trece pe parcursul ciclului sau de viata.



Stare – detalieri comportament intern

- Comportament intern

- /entry – la intrare in stare
- /do – in timpul starii
- /exit – la iesire din stare

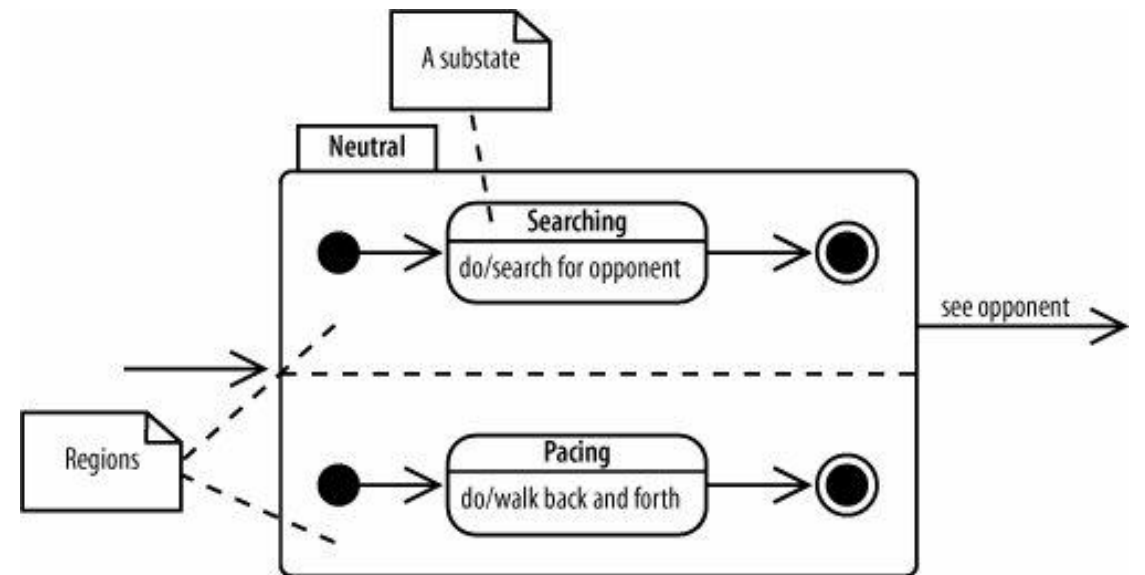


- Transitii interne

- Modeleaza reactii la evenimente fara parasirea starii curente

Stari compuse

- Contine una sau mai multe masini de stare
- Masinile de stare sunt divizate in regiuni
- Fiecare masina de stare apartine unei regiuni
- Executie paralela a regiunilor



Stari compuse

- Metoda alternative de reprezentare a starilor compuse

