State Machine Diagram
Leave Management System (LMS)

Overview

- What are State Machine Diagrams?
  - Behavioral State Machine
    - Vertex
    - Behavioral State
    - Pseudostate
    - Final State
    - Behavioral Transition
  - Protocol State Machine
    - State
    - Transition
- State Machine Diagram for LMS

State Machine Diagram for LMS

We will now derive the State Machine Diagram for LMS. The steps are:

- Identify the states
- Identify the transitions (including pre-condition, post-condition and triggers) which changes one state into the other state
- Derive the final State Machine Diagram

State Machine Diagram for LMS

States of LMS

We identify the states of the Leave Life-cycle

- New
- Requested
- Approved
- Regretted
- Availed
- Canceled
- Archived

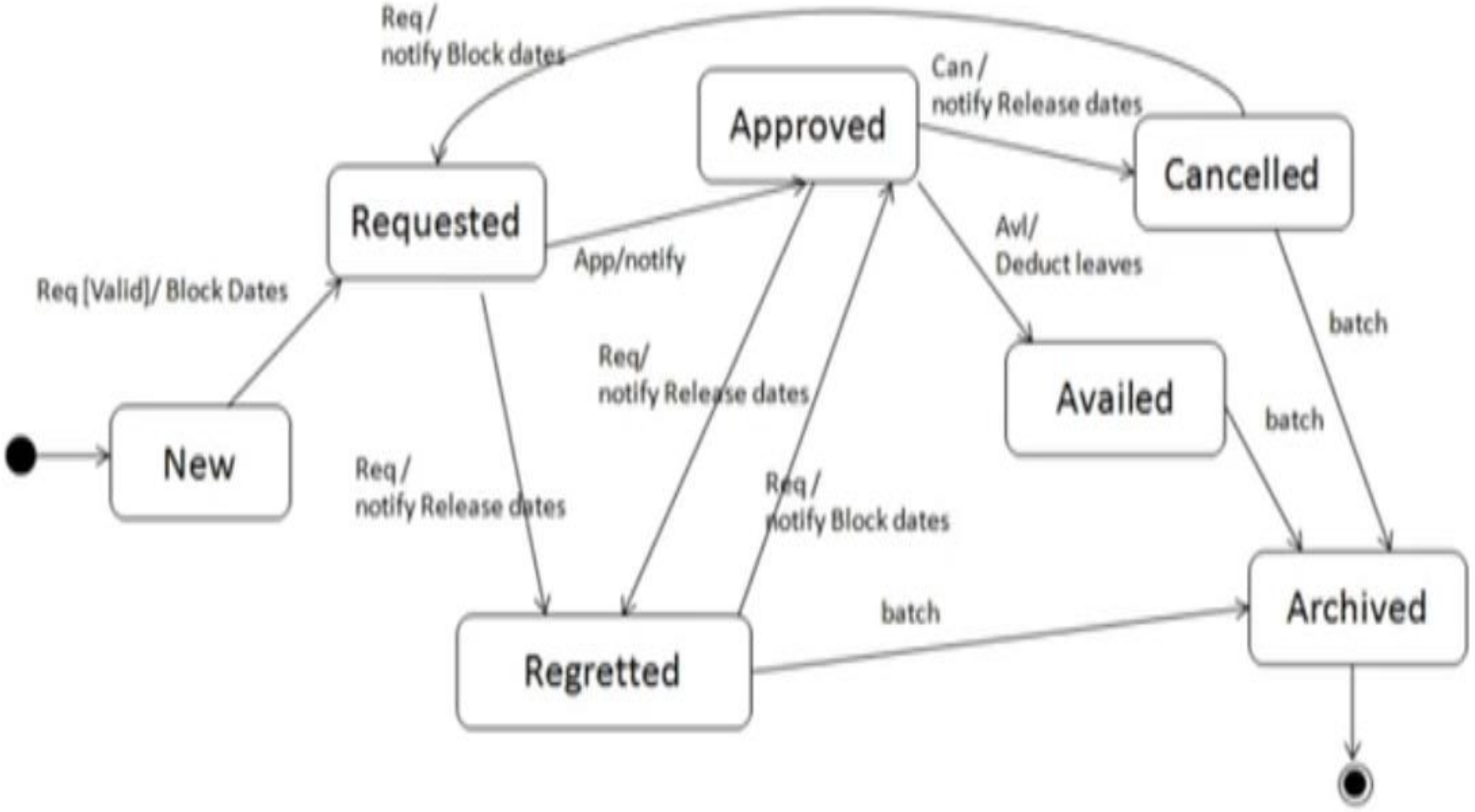
State Machine Diagram for LMS

Transitions of LMS

We identify the states of the Leave Life-cycle

- New to Requested: Req[valid] / Block Dates
- Requested to Approved: App / Notify
- Requested to Regretted: Req / Notify Release Dates
- Approved to Canceled: Can / Notify Release Dates
- Approved to Availed: Avl/ Deduct Leave
- Approved to Regretted: Req / Notify Release Dates
- Regretted to Archived: batch
- Regretted to Approved: Req / Notify Block Dates
- Availed to Archived: batch
- Canceled to Archived: batch
- Canceled to Requested: Req / Notify Block Dates

State Machine Diagram for LMS



Reference

Source: NPTEL - Object-Oriented Analysis and Design, IIT Kharagpur Prof. Partha Pratim Das Prof. Samiran Chattopadhyay Prof. Kausik Datta

https://nptel.ac.in/courses/106105153