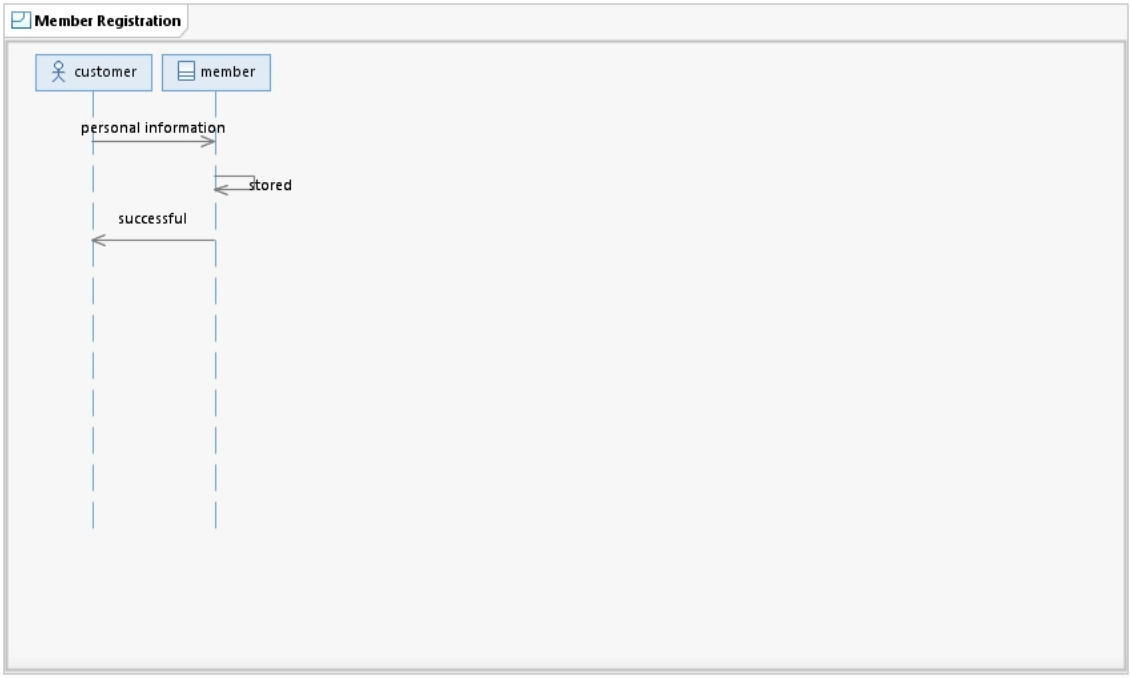
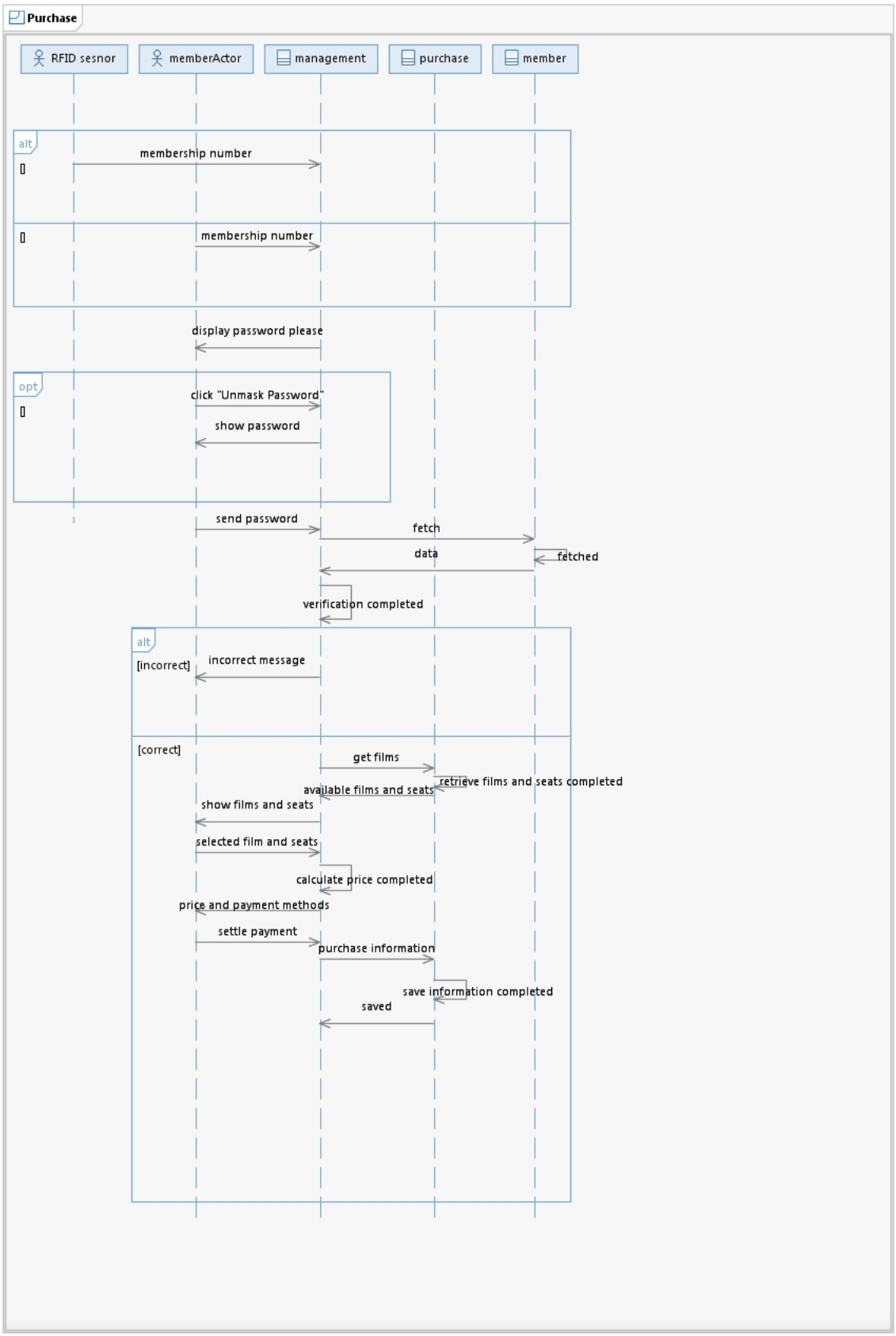
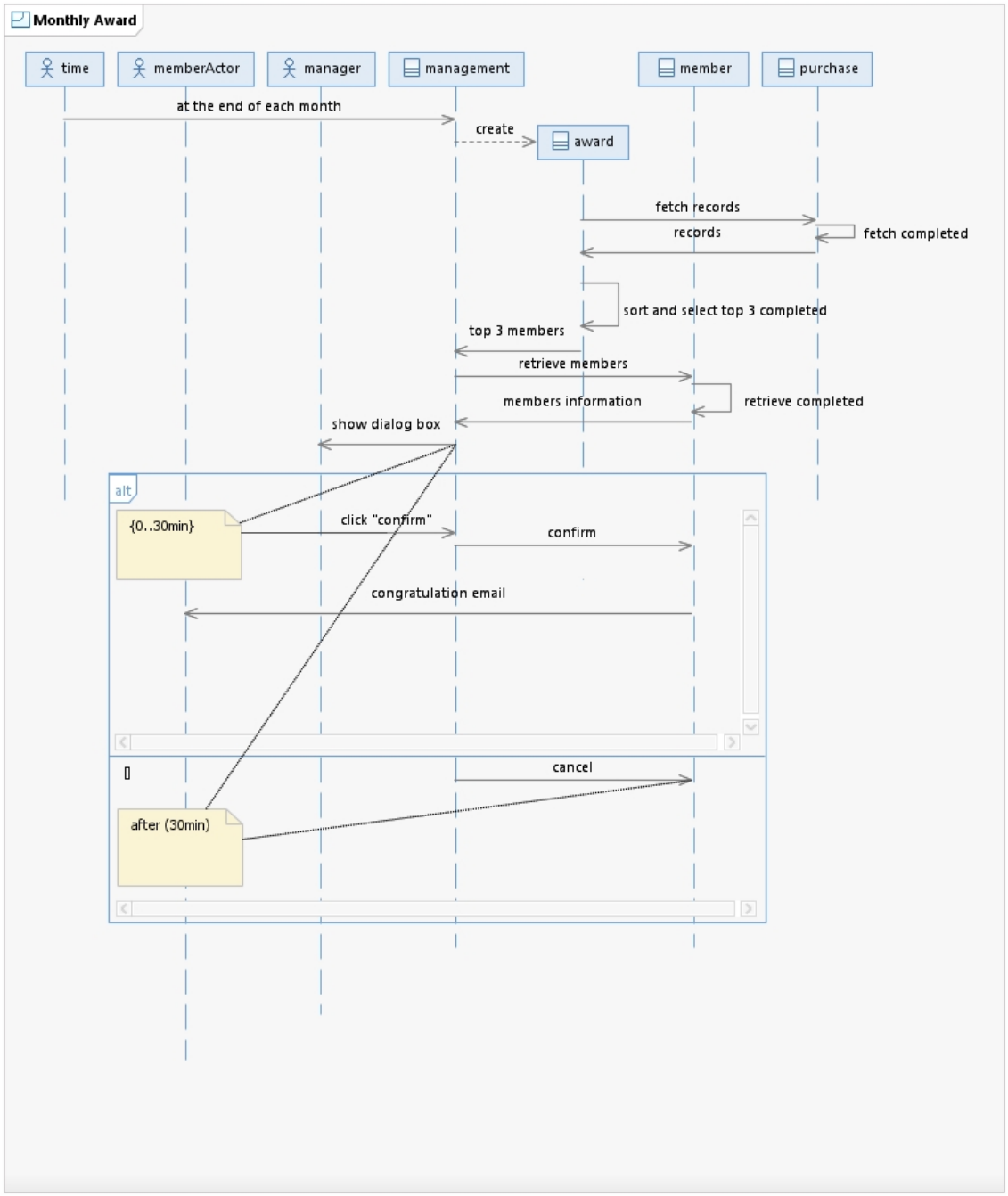
COMP7201 Analysis and design of enterprise applications in UML

Assignment 2 Sample Solution

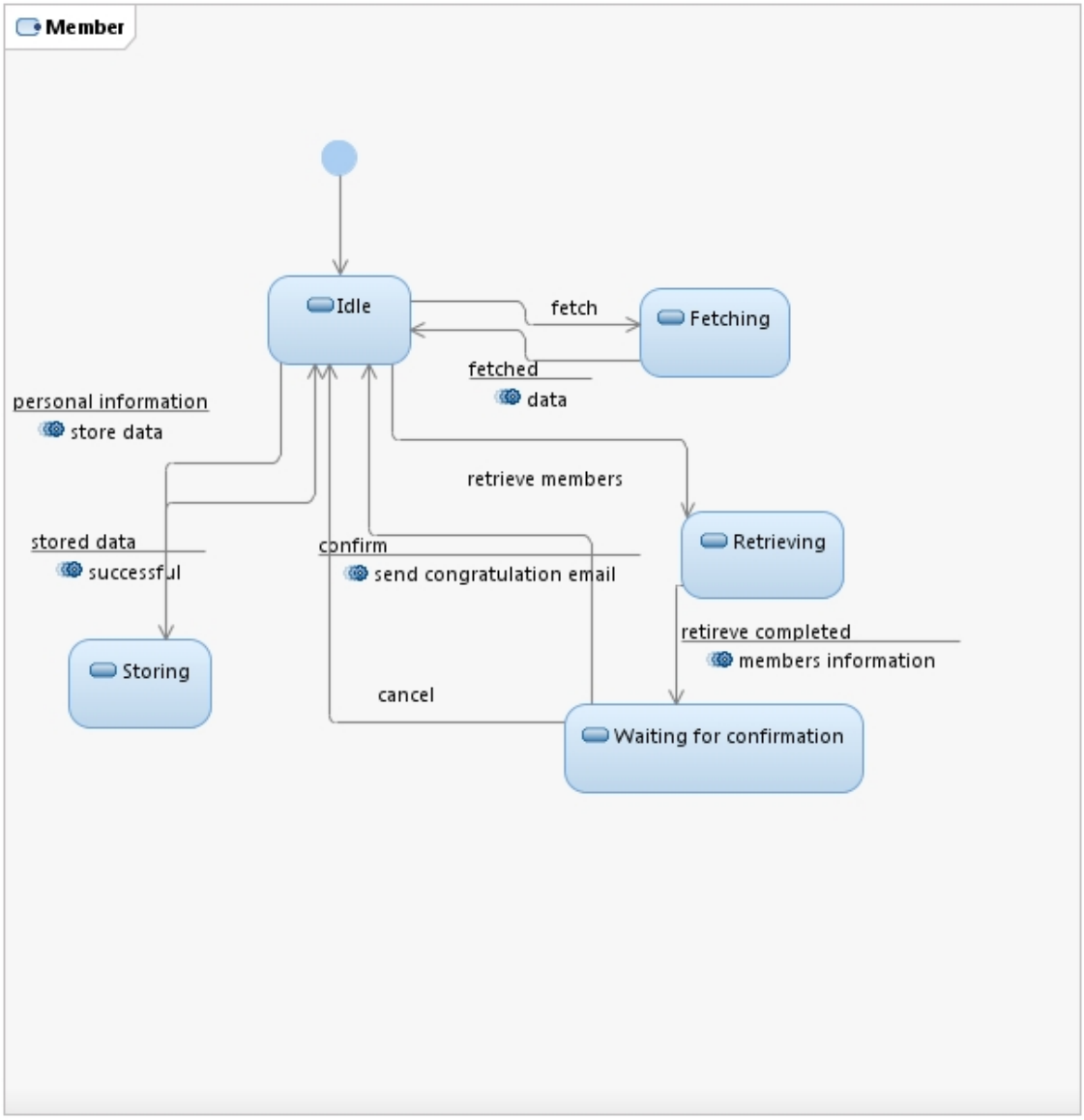
There is no model answer in software engineering. The following document serves only as a sample solution to help students to understand the main concepts and practice in dynamic modeling. It should not be interpreted as the only possible solution or the best solution.

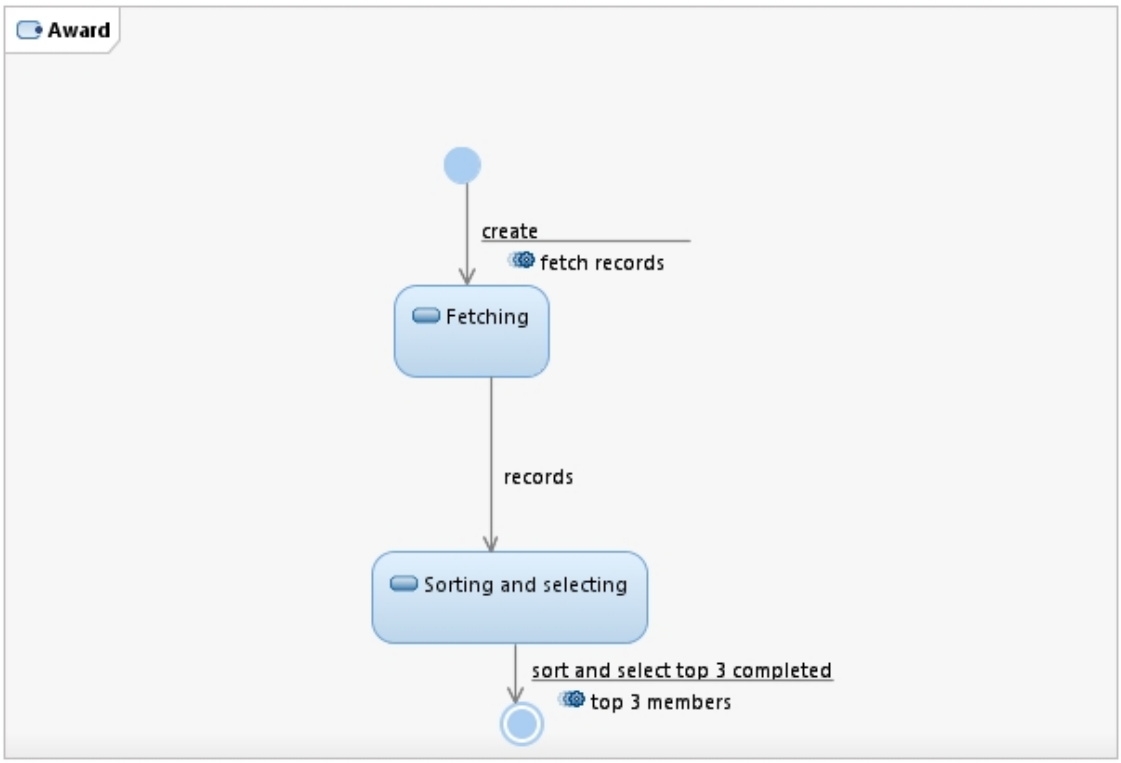


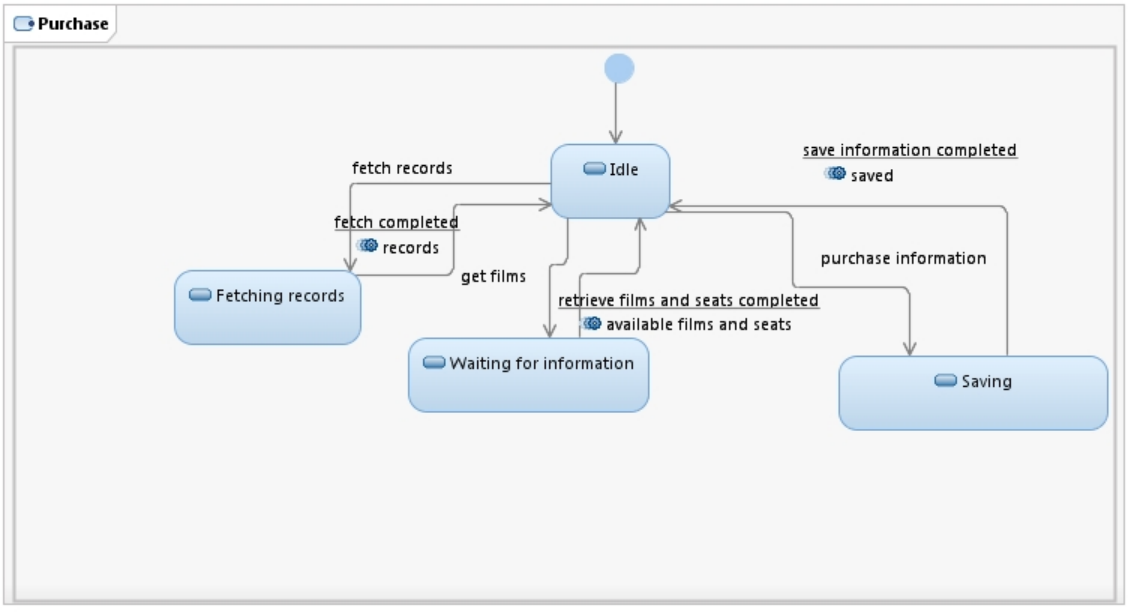

Purchase
RFID sesnor
memberActor
management
purchase
member
alt
membership number
[]
[]
membership number
display password please
opt
[]
click "Unmask Password"
show password
send password
fetch
data
fetched
verification completed
alt
[incorrect]
incorrect message
[correct]
get films
retrieve films and seats completed
available films and seats
show films and seats
selected film and seats
calculate price completed
price and payment methods
settle payment
purchase information
save information completed
saved

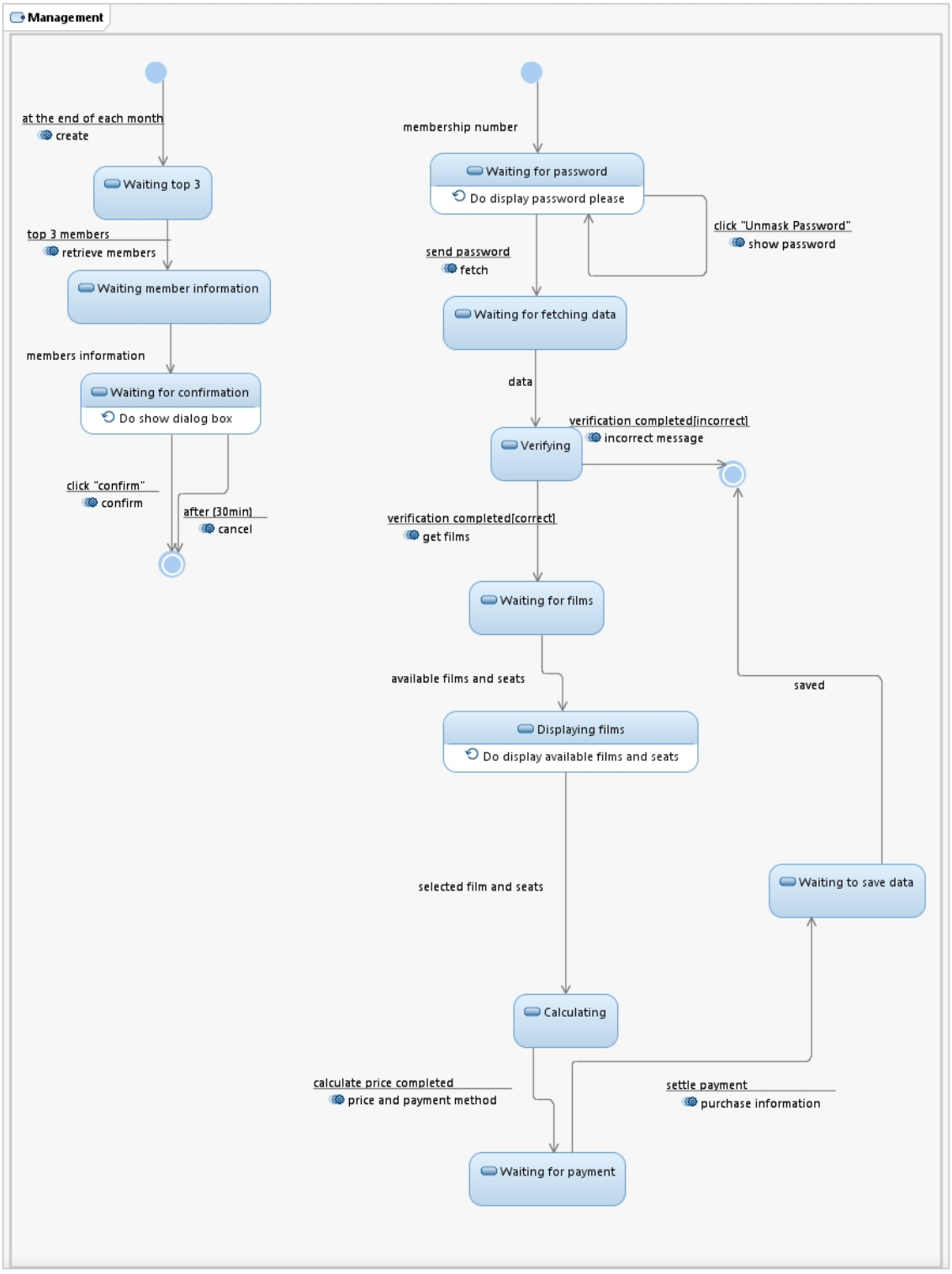

Monthly Award
time
memberActor
manager
management
award
member
purchase
at the end of each month
create
fetch records
records
fetch completed
sort and select top 3 completed
top 3 members
retrieve members
members information
retrieve completed
show dialog box
alt
{0..30min}
click "confirm"
confirm
congratulation email
[]
cancel
after (30min)

State Machines




Award
create
fetch records
Fetching
records
Sorting and selecting
sort and select top 3 completed
top 3 members


Purchase
Idle
fetch records
fetch completed
records
Fetching records
get films
save information completed
saved
purchase information
retrieve films and seats completed
available films and seats
Waiting for information
Saving


Management
at the end of each month
create
Waiting top 3
top 3 members
retrieve members
Waiting member information
members information
Waiting for confirmation
Do show dialog box
click "confirm"
confirm
after (30min)
cancel
membership number
Waiting for password
Do display password please
click "Unmask Password"
show password
send password
fetch
Waiting for fetching data
data
Verifying
verification completed[incorrect]
incorrect message
verification completed[correct]
get films
Waiting for films
available films and seats
Displaying films
Do display available films and seats
saved
selected film and seats
Waiting to save data
Calculating
calculate price completed
price and payment method
settle payment
purchase information
Waiting for payment