Activity Diagram : Buy ticket

- Ask to select a date
- Show the movies available on that date
  - Note: Each time the date changes, the list of films is updated
  - Note: There will always be at least one cinema available, as the film is only made available if present in at least one cinema on the selected date
- Ask to select a movie
- Show cinema showing the movie on that date
- Ask to select a cinema
- Show the times available for the selected cinema
  - Note: All time slots showing that movie on that day in that specific cinema are shown
- Ask to select a projection
  - Note: A projection indicates the selection of a cinema and a time of presentation of the film
- Search the seats for that projection
  - Note: All seats have already been bought
  - [Else]
  - [Places available]
- Show seats list
- Ask to choose a seat
- Ask for additional options
  - [Else]
  - [Additional options required]
- Finalize purchase*
- Update ticket price

Activity Diagram : Finalize the purchase*

- Note: For simplicity, a multi-threaded solution has not been implemented
- Ask for the payment method
- Add ticket to the list of owned ticket
- Note: The payment session lasts exactly 5 minutes, if after that time a payment method has not yet been accepted, the ticket is eliminated and the seat is back available
- 5 minutes
- [Else]
- [Valid method]
- Send confirmation email
  - [Else]
  - [Timer expired]
- Remove ticket to the list of owned ticket