**Full name:**

**Login:**

**Result:**

**Senior analyst requirements:**

* Following object was identified in a system analysis – smart card; this object is defined in a system class named SmartCard and has following methods and attributes:
  + Methods: activateCard, hackIdentified
  + Attributes: active, registered
* We need to design the class behavior so we’ll be able to determine states that will cover following…
  + distinct smart card states between inactivated, activated and registered
  + object of smart card can’t be created without taking it from warehouse in its inactive state, thus inactivity must be initial state of the smart card
  + activation of card is prior to the registration
  + registration of the card is optional and may never happen
  + system must block the card in case of fraudulent (hacked) activation. It might happen in process of activation or registration.
  + the object states can be concluded only from object described as “activated”, “registered” or “blocked”

**Tasks:**

1. Identify and draw all states using UML Statemachine diagram based on senior analyst’s requirements
2. Draw into the diagram all transitions between the states based on the requirements