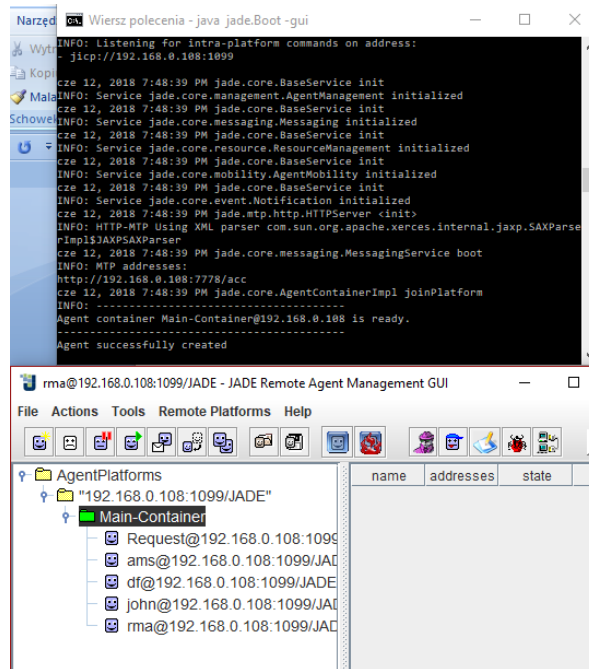


Dajana Kopera, gr1
Inżynieria Obliczeniowa, rok 3
Nr albumu: 286108

SPRAWOZDANIE 12

Ćwiczenia 12 – interakcje z AMS, mobilność.

1. Pobrałam ze strony <http://jade.tilab.com/book/chapter05/src/Request2AMSAgent.java.txt> pobrałam kod, skompilowałam.



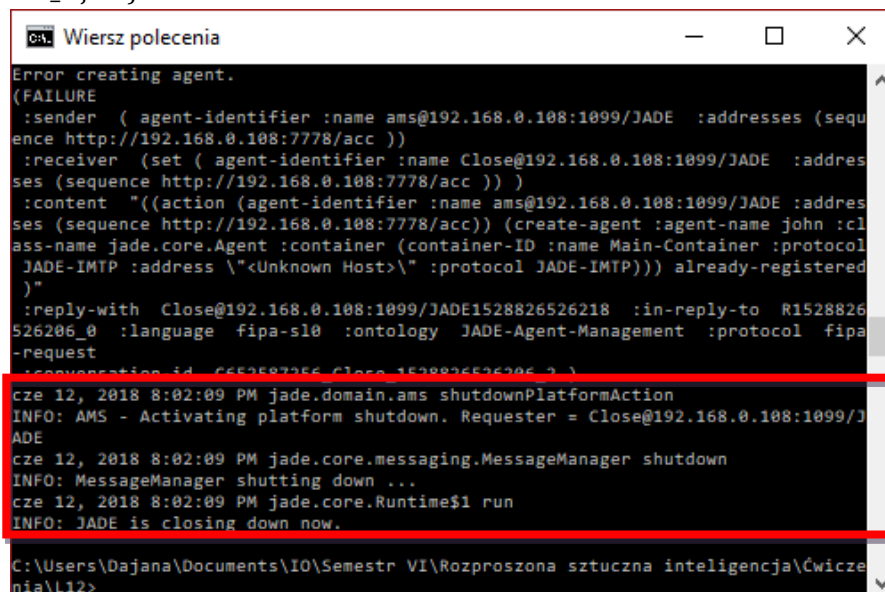
The screenshot shows a terminal window titled 'Wiersz polecenia - java jade.Boot-gui' with the following output:

```
INFO: Listening for intra-platform commands on address: jicp://192.168.0.108:1099
cze 12, 2018 7:48:39 PM jade.core.BaseService init
INFO: Service jade.core.management.AgentManagement initialized
cze 12, 2018 7:48:39 PM jade.core.BaseService init
INFO: Service jade.core.messaging.Messaging initialized
cze 12, 2018 7:48:39 PM jade.core.BaseService init
INFO: Service jade.core.resource.ResourceManagement initialized
cze 12, 2018 7:48:39 PM jade.core.BaseService init
INFO: Service jade.core.mobility.AgentMobility initialized
cze 12, 2018 7:48:39 PM jade.core.BaseService init
INFO: Service jade.core.event.Notification initialized
cze 12, 2018 7:48:39 PM jade.mtp.http.HTTPServer (init)
INFO: HTTP-MTP Using XML parser com.sun.org.apache.xerces.internal.jaxp.SAXParserImpl$JAXPSAXParser
cze 12, 2018 7:48:39 PM jade.messaging.MessagingService boot
INFO: MTP addresses: http://192.168.0.108:7778/acc
cze 12, 2018 7:48:39 PM jade.core.AgentContainerImpl joinPlatform
INFO: -----
Agent container Main-Container@192.168.0.108 is ready.
-----
Agent successfully created
```

Below the terminal is the 'rma@192.168.0.108:1099/JADE - JADE Remote Agent Management GUI' window. It shows a tree view of 'AgentPlatforms' with 'Main-Container' expanded, listing several agents: 'Request@192.168.0.108:1099', 'ams@192.168.0.108:1099/JADE', 'df@192.168.0.108:1099/JADE', 'john@192.168.0.108:1099/JADE', and 'rma@192.168.0.108:1099/JADE'.

Można zauważyć, że podczas uruchamiania ściągniętego kodu zostają stworzeni dwaj agenci - Request oraz john (stworzony przez agenta Request).

2. Następnie należało tak zmodyfikować przykład, by tworzony agent powodował zamknięcie platformy (Closing_platform_2.java).



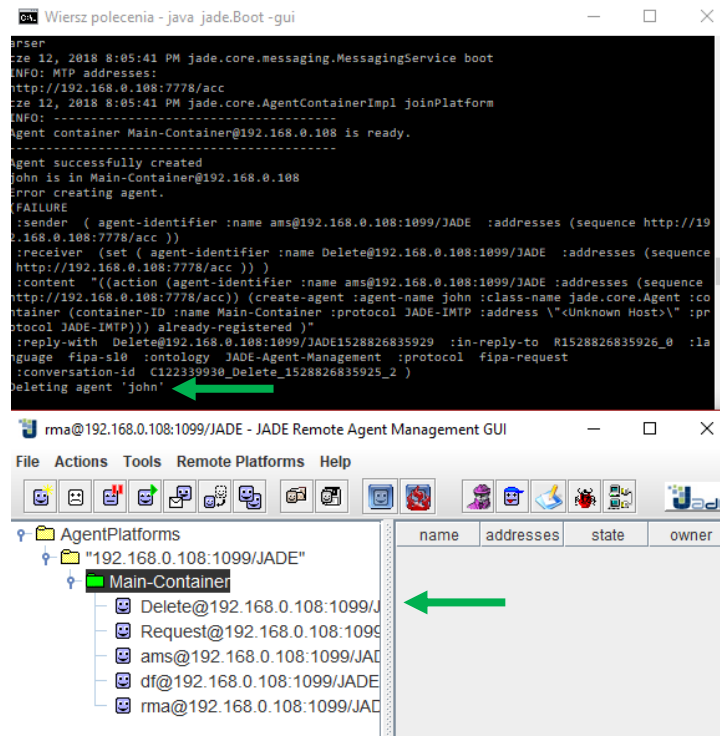
The screenshot shows a terminal window titled 'Wiersz polecenia' with the following output:

```
Error creating agent.
(Failure
:sender ( agent-identifier :name ams@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc ))
:receiver (set ( agent-identifier :name Close@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc )) )
:content "((action (agent-identifier :name ams@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc)) (create-agent :agent-name john :class-name jade.core.Agent :container (container-ID :name Main-Container :protocol JADE-IMTP :address \"<Unknown Host>\" :protocol JADE-IMTP))) already-registered)"
:reply-with Close@192.168.0.108:1099/JADE1528826526218 :in-reply-to R1528826526206_0 :language fipa-slo :ontology JADE-Agent-Management :protocol fipa-request
:conversation-id 6553587356-Close-1528826526206_0)

cze 12, 2018 8:02:09 PM jade.domain.ams.shutdownPlatformAction
INFO: AMS - Activating platform shutdown. Requester = Close@192.168.0.108:1099/JADE
cze 12, 2018 8:02:09 PM jade.core.messaging.MessageManager shutdown
INFO: MessageManager shutting down ...
cze 12, 2018 8:02:09 PM jade.core.Runtime$1 run
INFO: JADE is closing down now.
```

The last part of the output is highlighted with a red box. The terminal path at the bottom is 'C:\Users\Dajana\Documents\IO\Semestr VI\Rozproszona sztuczna inteligencja\Ćwiczenia\L12>'.

3. Później należało tak zmodyfikować przykład, by tworzony agent usuwał innego agenta o zadanej nazwie. W tym przypadku usuwanym agentem jest „john”, który zostaje wcześniej stworzony przez agenta Request.



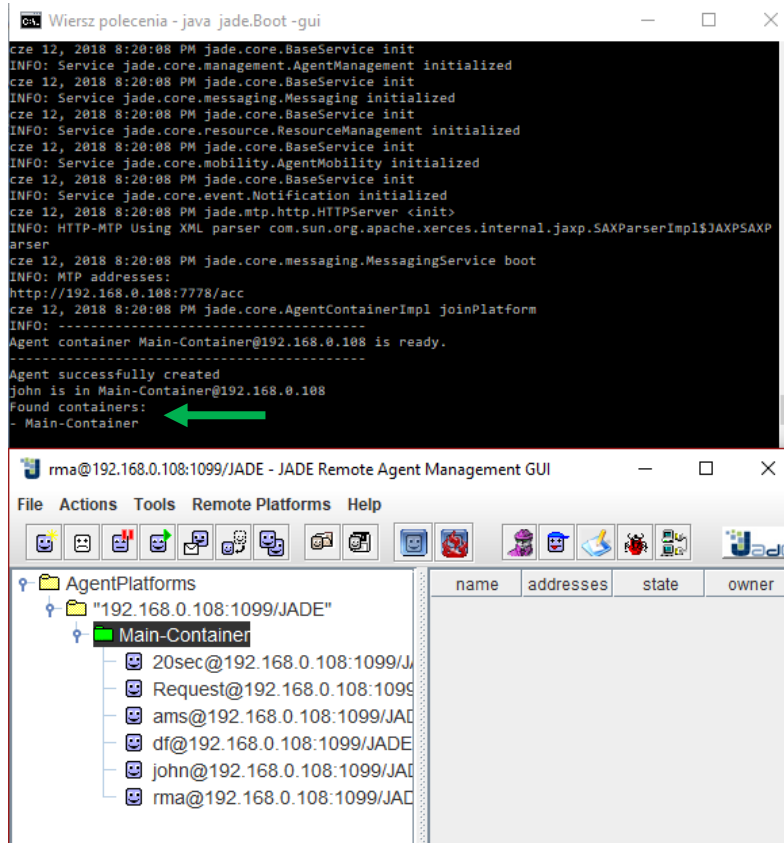
The screenshot shows a terminal window titled "Wiersz polecenia - java jade.Boot -gui" and the JADE Remote Agent Management GUI. The terminal output shows the successful creation of agent 'john' and its subsequent deletion. The GUI shows a tree view of agent platforms, with 'Main-Container' selected. A green arrow points to the 'Delete@192.168.0.108:1099/JADE' entry in the tree.

```
Wiersz polecenia - java jade.Boot -gui
cze 12, 2018 8:05:41 PM jade.core.messaging.MessagingService boot
INFO: MTP addresses:
http://192.168.0.108:7778/acc
cze 12, 2018 8:05:41 PM jade.core.AgentContainerImpl joinPlatform
INFO: -----
Agent container Main-Container@192.168.0.108 is ready.
-----
Agent successfully created
john is in Main-Container@192.168.0.108
Error creating agent.
FAILURE
sender ( agent-identifier :name ams@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc ))
receiver (set ( agent-identifier :name Delete@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc )) )
content "((action (agent-identifier :name ams@192.168.0.108:1099/JADE :addresses (sequence http://192.168.0.108:7778/acc)) (create-agent :agent-name john :class-name jade.core.Agent :container (container-ID :name Main-Container :protocol JADE-IMTP :address \"<Unknown Host>\") :protocol JADE-IMTP))) already-registered )"
reply-with Delete@192.168.0.108:1099/JADE1528826835929 :in-reply-to R1528826835926_0 :language fipa-s10 :ontology JADE-Agent-Management :protocol fipa-request :conversation-id C122339930_Delete_1528826835925_2 )
Deleting agent 'john'
```

JADE Remote Agent Management GUI

name	addresses	state	owner
192.168.0.108:1099/JADE			
Main-Container			
Delete@192.168.0.108:1099/JADE			
Request@192.168.0.108:1099/JADE			
ams@192.168.0.108:1099/JADE			
df@192.168.0.108:1099/JADE			
rma@192.168.0.108:1099/JADE			

4. Następnie należało tak zmodyfikować przykład, by tworzony agent co 20 sekund wypisywał wszystkie dostępne kontenery na platformie.



The screenshot shows a terminal window titled "Wiersz polecenia - java jade.Boot -gui" and the JADE Remote Agent Management GUI. The terminal output shows the successful creation of agent '20sec'. The GUI shows a tree view of agent platforms, with 'Main-Container' selected. A green arrow points to the '20sec@192.168.0.108:1099/JADE' entry in the tree.

```
Wiersz polecenia - java jade.Boot -gui
cze 12, 2018 8:20:08 PM jade.core.BaseService init
INFO: Service jade.core.management.AgentManagement initialized
cze 12, 2018 8:20:08 PM jade.core.BaseService init
INFO: Service jade.core.messaging.Messaging initialized
cze 12, 2018 8:20:08 PM jade.core.BaseService init
INFO: Service jade.core.resource.ResourceManagement initialized
cze 12, 2018 8:20:08 PM jade.core.BaseService init
INFO: Service jade.core.mobility.AgentMobility initialized
cze 12, 2018 8:20:08 PM jade.core.BaseService init
INFO: Service jade.core.event.Notification initialized
cze 12, 2018 8:20:08 PM jade.mtp.http.HTTPServer <init>
INFO: HTTP-MTP Using XML parser com.sun.org.apache.xerces.internal.jaxp.SAXParserImpl$JAXPSAXParser
cze 12, 2018 8:20:08 PM jade.core.messaging.MessagingService boot
INFO: MTP addresses:
http://192.168.0.108:7778/acc
cze 12, 2018 8:20:08 PM jade.core.AgentContainerImpl joinPlatform
INFO: -----
Agent container Main-Container@192.168.0.108 is ready.
-----
Agent successfully created
john is in Main-Container@192.168.0.108
Found containers:
- Main-Container
```

JADE Remote Agent Management GUI

name	addresses	state	owner
192.168.0.108:1099/JADE			
Main-Container			
20sec@192.168.0.108:1099/JADE			
Request@192.168.0.108:1099/JADE			
ams@192.168.0.108:1099/JADE			
df@192.168.0.108:1099/JADE			
john@192.168.0.108:1099/JADE			
rma@192.168.0.108:1099/JADE			

5. Kolejno należało tak zmodyfikować agenta z poprzedniego zadania, by agent po wypisaniu kontenerów przenosił się losowo do jednego kontenera (nowe kontenery tworzyłam poprzez otwieranie kolejnych okien cmd, a następnie wpisywanie komendy `java jade.Boot -container`).

