

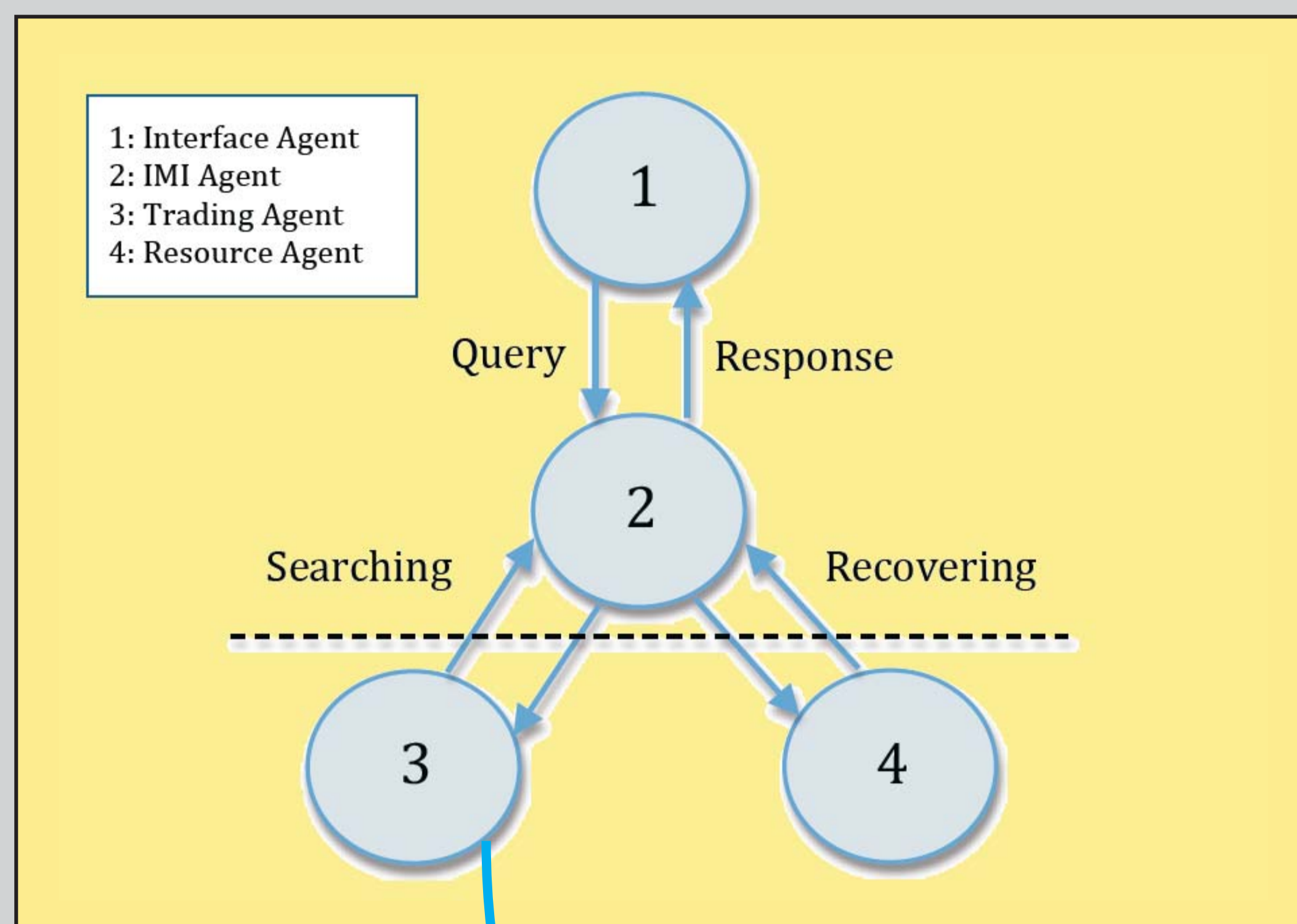
# INVOLVING WEB-TRADING AGENTS & MAS

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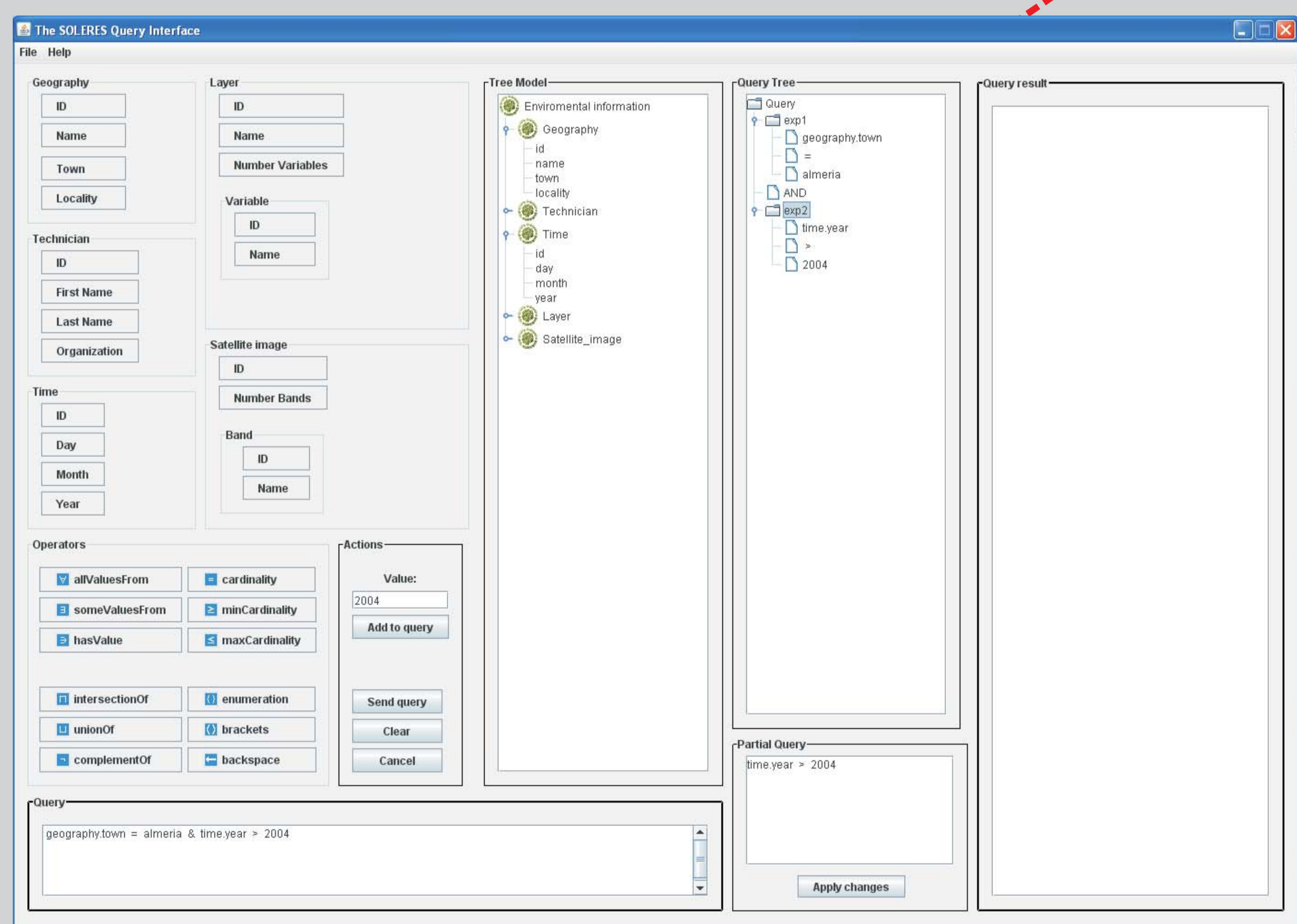
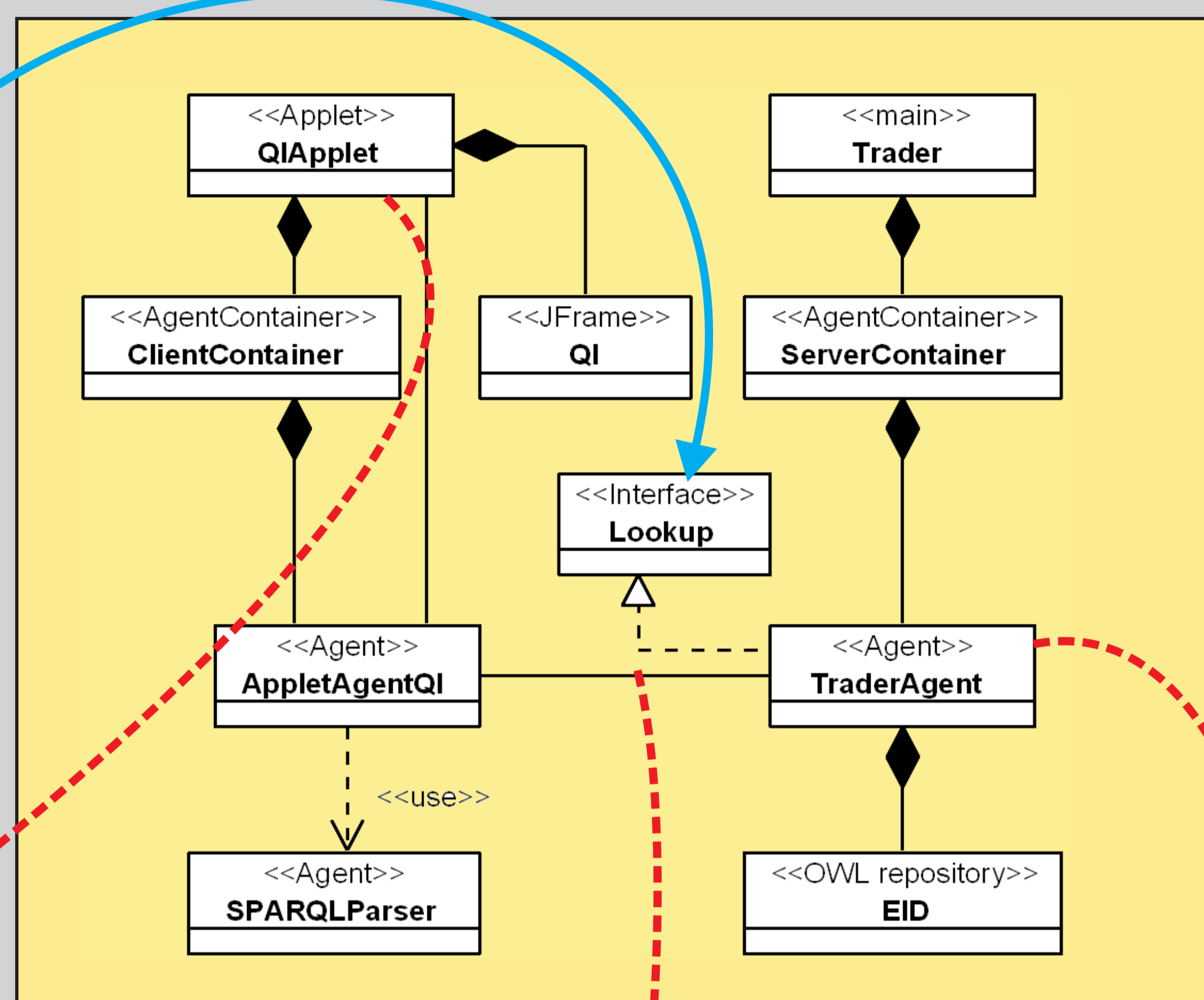
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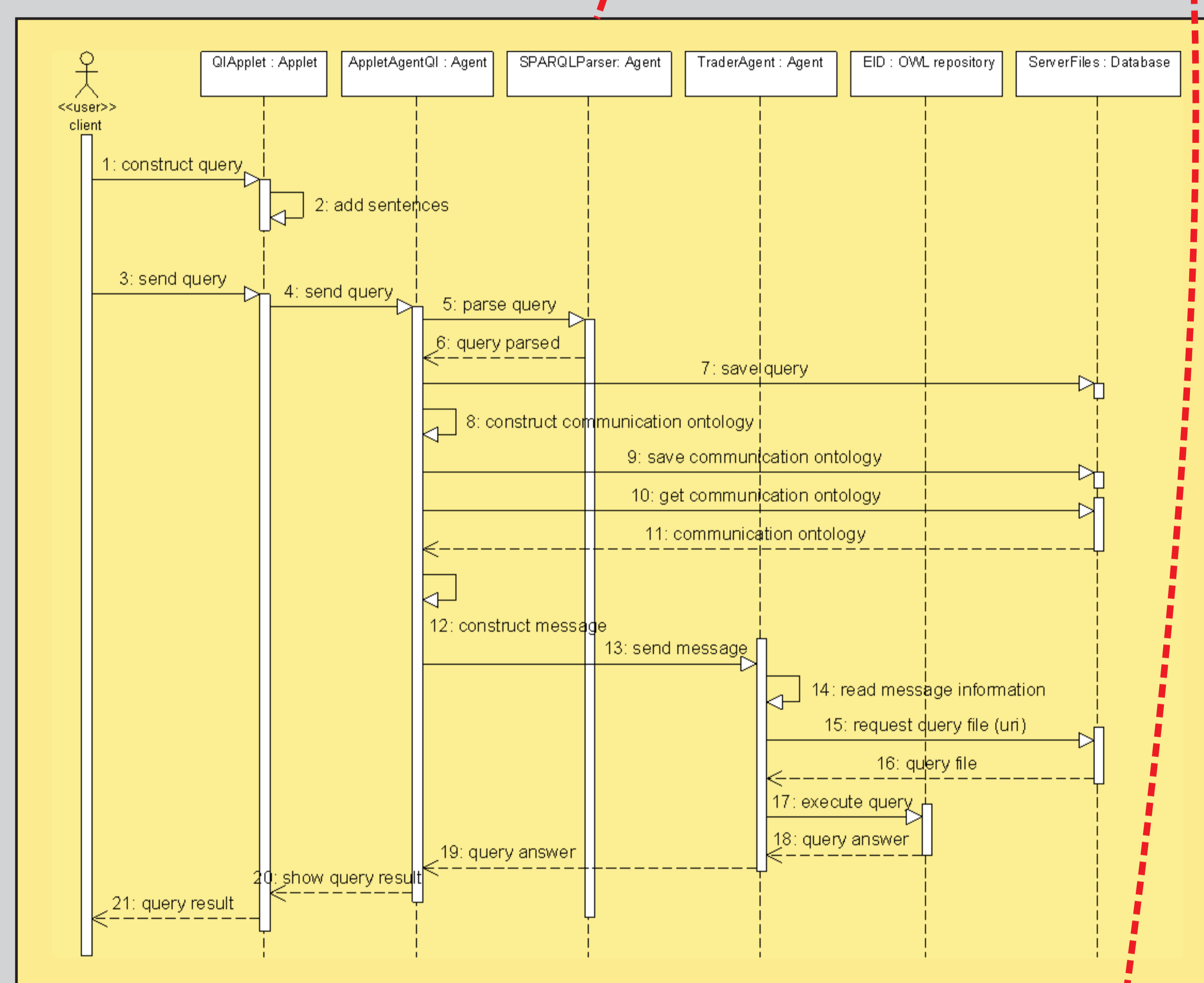
The SOLERES architecture is based on Query/Searching-Recovery/Response model.



The trader has been implemented by a software agent  
 This is the meta-model of its Lookup interface subsystem.



The Query user interface operates through an agent, which constructs and sends user queries, and receives and show the results.



Sequential diagram of the query action between an client user and the system.

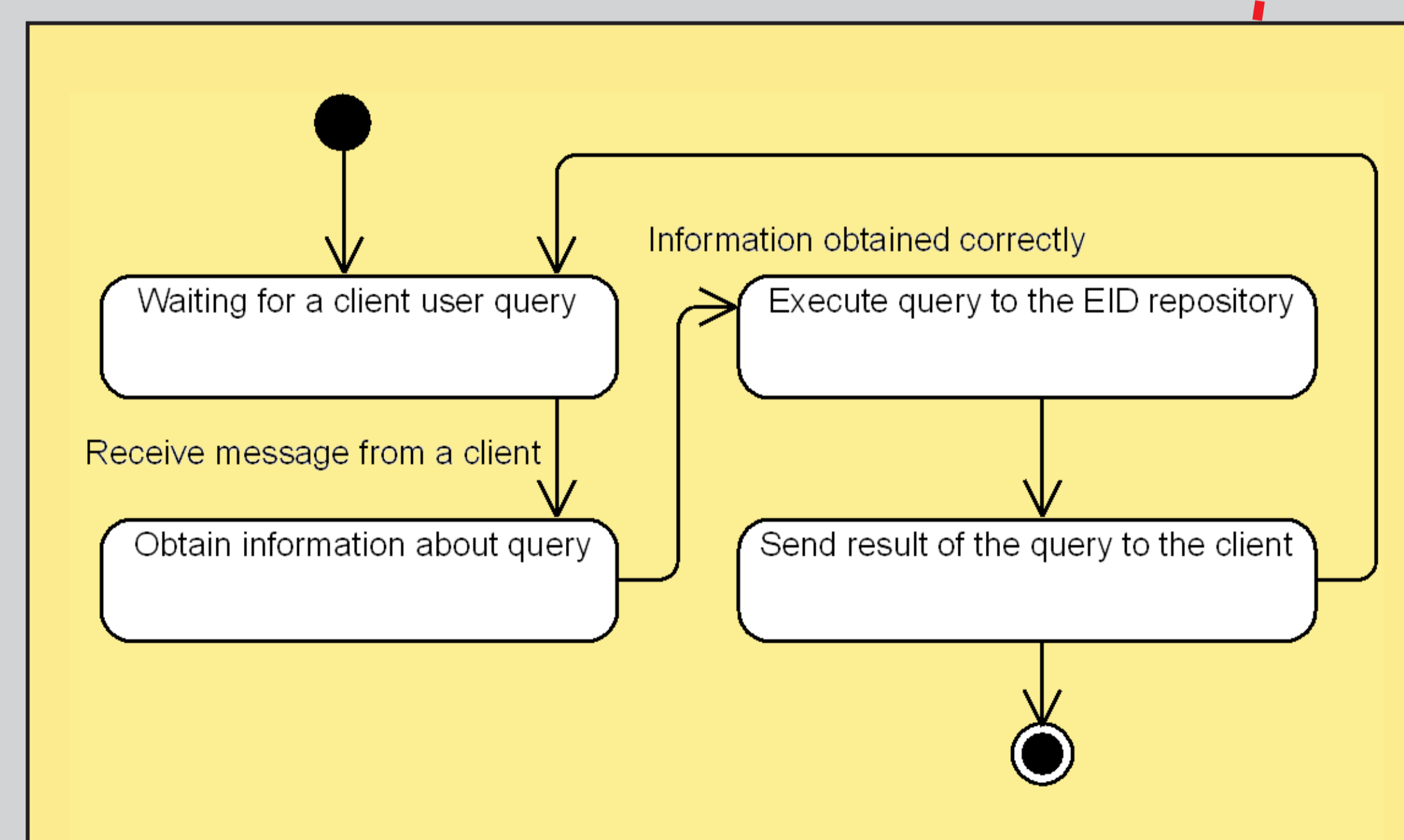
```
? classif: geo.name = "Almeria" & layer.name = "lithology" & layer.variable.name = "sand"
```

Query translation from interface language to SPARQL

```
PREFIX onto: <http://.../acg/soleres/owl#>
SELECT ?classif
WHERE {
  ?classif onto:classification_shows_geo ?g.
  ?g onto:geography_name "Almeria".
  ?classif onto:classification_uses_layer ?l.
  ?l onto:layer_has_variable ?v.
  ?l onto:layer_name "lithology".
  ?v onto:variable_name "sand".
}
ORDER BY ?year
```

An example of query translation, execution and result obtained.

**RESULT: A register with the classification according to the information indicated**



Trader Agent Behaviour modelled and implemented as a finite state machine.

## ACKNOWLEDGEMENTS

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