MAGO Model

Group-based approach for modeling interactive mobile applications

capture the group dynamics
manage the interactions between group members
offers different kinds of communications mechanisms
shared data inside each group
explicit and implicit groups
diversity of application areas

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MAGO (Modeling Applications with a Group Oriented approach) proposes a model to ease the development of interactive mobile and dynamic applications.

The model allows the organization of systems in terms of multiple groups, each group being considered as a unit of system composition with a well defined interface.

Multiple entities can dynamically enter and leave groups, and distinct forms of communication among the group members are allowed.

Explicit and implicit groups can be used, the latter being automatically generated by the system, based on the actual characteristics of the users who are active on the system.

The model encompasses a set of primitives and services that are specialized for environments supporting group based applications.

The primitives help the developer to specify the collaboration and communication between members of established groups.

The available communication mechanisms reflect the different kinds of possible interactions:
- direct to directly communicate with entities;
- events used for multicast information to a group (based on a subscription mechanism);
- shared space associated to each group is used to share data (based on a tuple space).

The information system maintains the information and data of the members and groups.