PAYAO: Web community tagging system to SBML models

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PAYAO: SBML Models Tagging System

“Payao” reads the models in SBML (Systems Biology Markup Language (http://sbml.org)) format, displays them with CellDesigner, a process diagram editor (http://celldesigner.org), adopting the Systems Biology Graphical Notation (http://sbgn.org), and provides an interface for adding tags and comments to the models for the community members.

PAYAO Major Features: (alpha 2)

Community Management:
- User access control

Model Management:
- Register SBML models to the system
- View the list of all the registered models
- Manage MyModels, and FavoriteModels
- View SBML models in CellDesigner 3.5 notation
- View “Notes” added by CellDesigner 3.5

Tagging/Comments:
- Add Tags (keywords, links, PubMed IDs, free text) to the target (Species/Reactions, user-defined components and areas)
- Add comments to the tags

System Requirement:
- Servlet container: Tomcat 5.5.x, JRE 5.0 and above
- Framework: Seaser 2 (S2Flex2)
- RDBMS: MySQL 5.0 and above
- CellDesigner 3.5 API

Future Plan
- alpha2 is available for development and testing only.
- beta-test with public access aiming at May.
- Full Integration with Text Mining System with Univ. Tokyo and Manchester University.
- Adopt CellDesigner 4.0 to be able to display the models in SBGN Level-1 draft graphical notation.
- In the long run, we would like to develop this system to be a platform for community model building system to accomodote both computational and experimental data.

How community uses PAYAO

1) Register a Model. Create a Community

I have a map. I want to use this map to build a knowledge base.

specifies which users to work together on the model.

specify the access level (Editor, View Only)

2) Tag to the Model

Let’s add new findings to this specific part of the model

Hey! I want to comment on this!

3) Add Comment to Tag

I have new papers related to this part of the model

Look. New Papers are published on my Proteins!

I want to discuss on this domain...

Which model is active now?

This part is controversial. Need more investigation.

Future Plan

"PAYAO"?

“Payao” is a fish aggregating device, an artificial floating raft where fish congregate. It is a popular fishing method in Okinawa area.

Acknowledgement:

This research is in part supported by the Okinawa Institute of Science and Technology (http://www.oist.jp/), and Establishment of a Human Genome Network Platform (MEXT).