

Visual Prototypes of fine-level OSLM

Independent study report

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Abstract

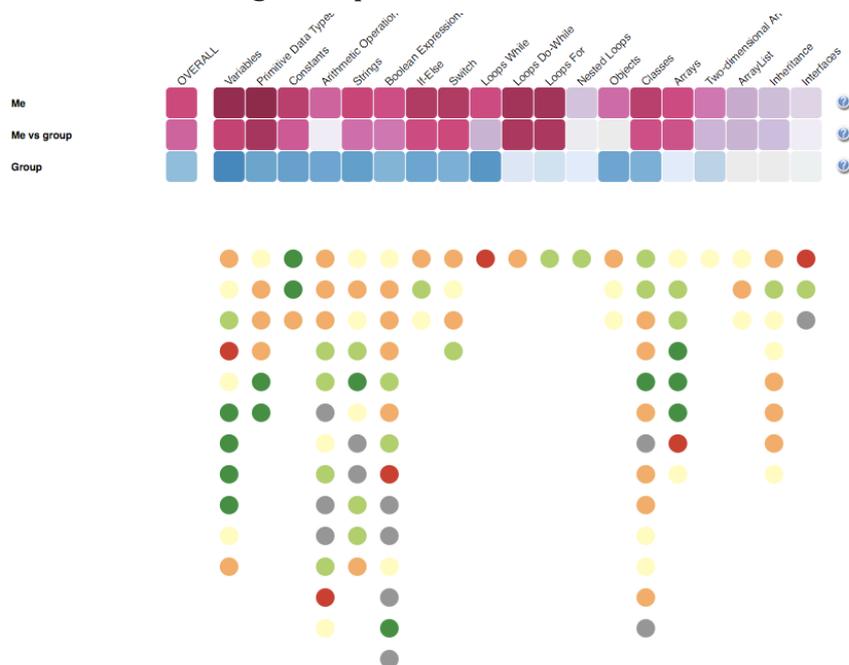
The idea of Open Social Learner Model (OSLM) is that learner can be motivated by comparing their performance to others' performance. Besides, learners can also be motivated by themselves' performance. To learn the relationship between users' behavior and the information they received, this study is aim to building different models and making conclusions from users' feedbacks.

Goals for the independent study

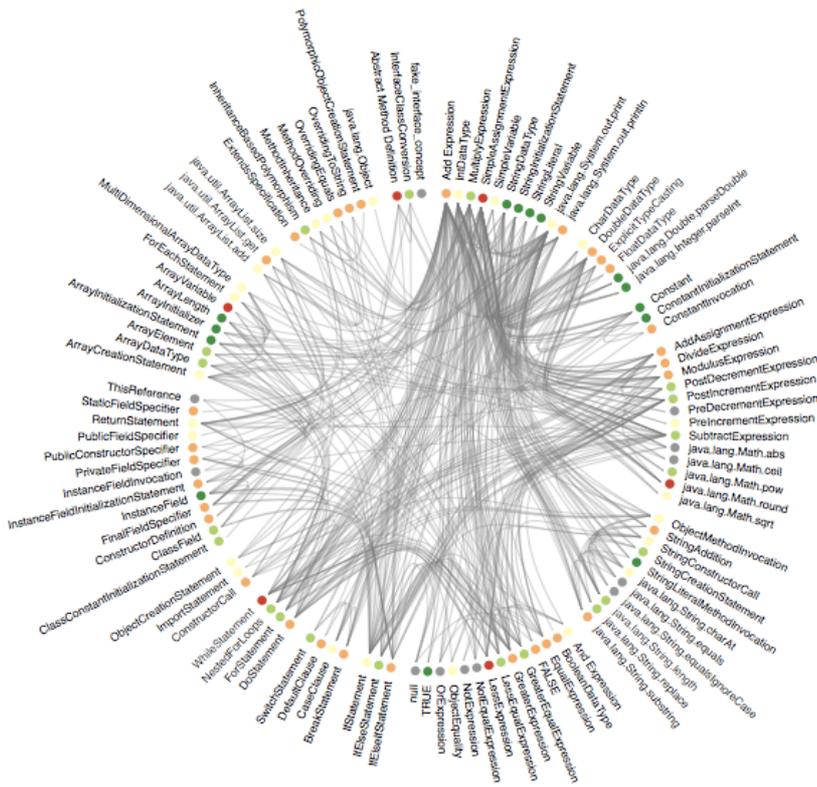
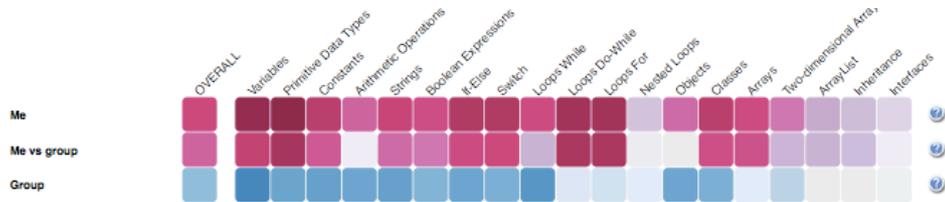
As the abstract above, the main goal of this study is to build different models and show diversely information to learners.

Some models have been created before, like ConceptMap, ConceptMatrix and Bipartite. So the first goal is doing refinement to those models.

The second goal is building new models like ConceptList and ConceptCircle. ConceptList is a model, which shows all the concepts of each topic and also can show all the links among concepts.



ConceptCircle is a model, which shows the same content as ConceptList but it represents all the information in a circle.



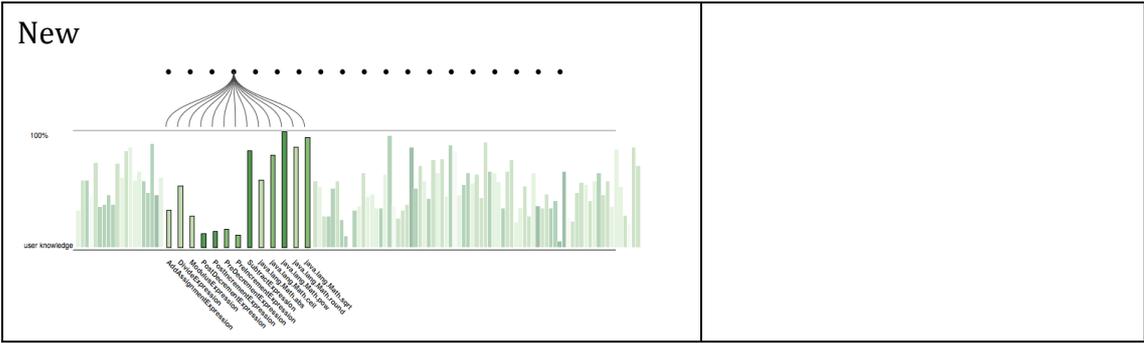
Technic used and test environment

Main Technic

JavaScript language

jQuery JavaScript framework

D3 JavaScript framework (core technic)



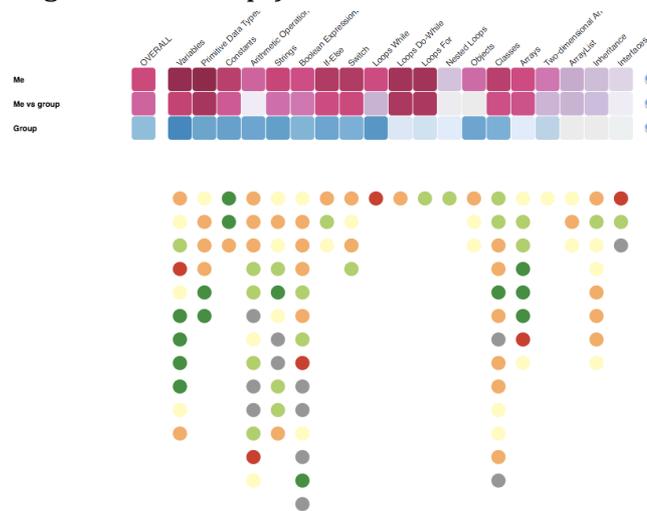
b. CONCEPTMAP

Improvements	Explanation
<p>Old</p>	<p>1. In the old version, there is always a big node in the middle of each group. But it will confuse the user because they may think the reason for the position and size. So the new version let each node has same size and random position.</p> <p>2. In the new version each node has a arc around itself to represent the process but the new one ignore that feature to let the glyph be simple and clear.</p>
<p>New</p>	

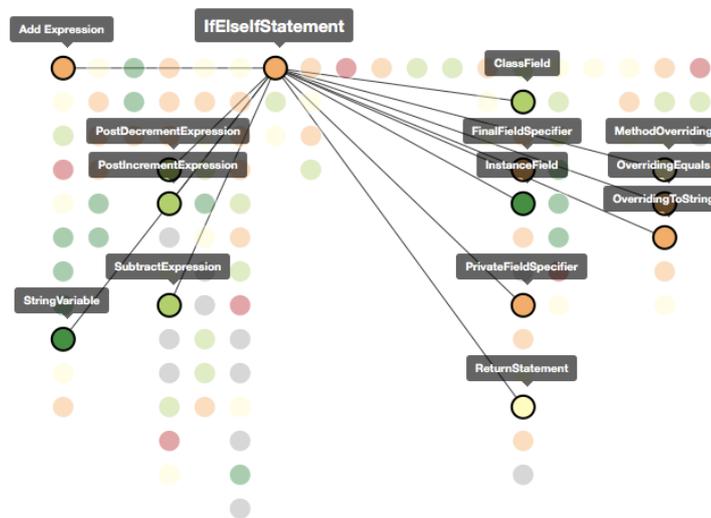
New versions

a. CONCEPTLIST

The figure below is the overview of ConceptList. From this figure, it can be seen that under each topic, there is a list of nodes which represents related concepts. And the color, which is from red to green, represents the user knowledge (gray means user hasn't given an attempt).

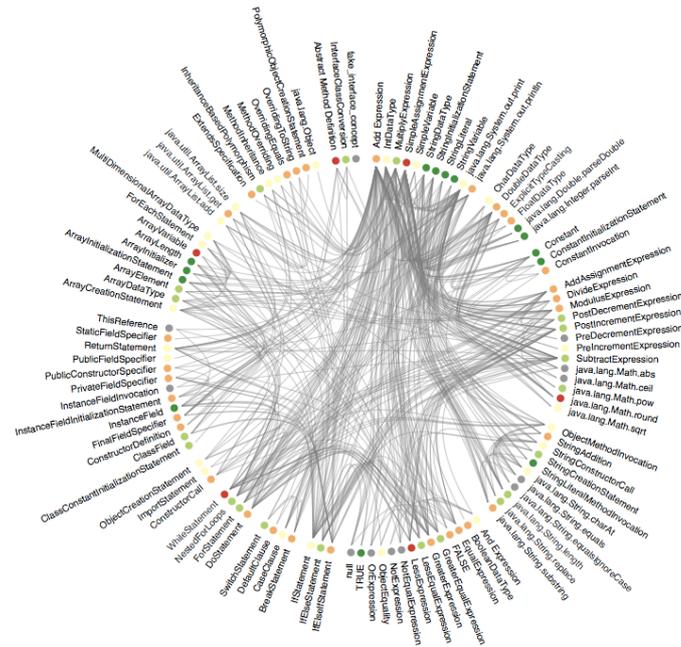


The next figure shows the effect when a user puts the mouse over a node. The model can show all the links the node has and all the connected nodes will be highlighted with their names. Thus, users can get this information in this directive way.



b. CONCEPTCIRCLE

The figure below is the overview of ConceptCircle. From this figure it can be seen that all the concepts are listed as a circle with those links and names. Colors from red to green also represent the user knowledge.



When a user put mouse over the grid, the group of concepts belongs to that topic will be highlighted as the figure below. Thus users can easily know which concept is in the topic they select.



Future work

Since I have attended a meeting with users, it seems that users like the bipartite model most. So maybe the future work will put focus on that model and also keep building new models. Besides, now, for the reason of making things be simpler, group's information are hidden. But in the future, it will be showed in an appropriate way because it is the core of this study: if the comparison will give a positive feedback to learners.