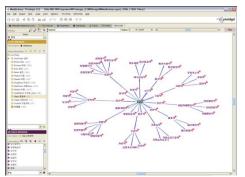# A TGViz based Viewing Plugin for Oriental Medicine Ontology

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TGVizTab is a plugin for Protégé which allows visualizing ontologies using the TouchGraph library [1]. TouchGraph provides a java library for rendering networks as interactive graphs [2]. TGVizTab plugin offers various functions and we have added some functions into the TGVizTab for the following requirements.
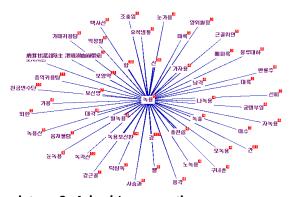
In domain of oriental medicine, a concept has a hierarchy same as the others. For an example, a kind of medicine, '발산풍한약'(BalSanPoongHanYac, 發散風寒藥, wind-cold-dispersing medicinal) is one of '해표약'(HaePyoYac, 解表藥, exterior-releasing medicinal) and one of '본초'(BonCho, 本草, materia medica) which means oriental medical herbs [3]. Much of relation in oriental medicine has this relationship and a user repeatedly wants follow a higher concept or category as shown in picture 2.

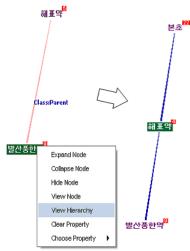And oriental medical herbs have a lot of properties as picture 3 and a user frequently likes to choose one category among them as picture 4.
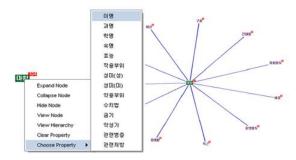

picture 1. Protégé and plugin

picture 2. Viewing hierarchy

picture 3. A herb's properties

picture 4. Filtered property

This plugin has no trouble to display Korean names and Chinese names but just warns Chinese names are not in Unicode Normal Form C [4]. It is very useful to navigate our oriental medicine ontology which a medicine or a formula shares the same effect or the same disease.

[1] http://www.touchgraph.com/navigator.html

[2] http://users.ecs.soton.ac.uk/ha/TGVizTab/

[3] WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region, World Health Organization, 2007

[4] Jena parse error message: {W131}