**XML file format agreed for the web-based front end**

<actions>

<action time="1359365427506">

<user id="Tom"/>

<object>

<properties>

<property name="VIEW\_URL" value=http://.../>

</properties>

</object>

<content>

<description>inactive|feedback shown|goal (un)checked bySystem</description>

<properties>

<property name=”ANALYSIS\_TYPE” value=”inactivity verifier”/>

<property name=”ANALYSIS\_TYPE” value=”true|false|wait for teacher|name of goal”/>

<property name=”value” value=”true|false|wait for teacher|name of goal”/>

</properties>

</content>

</action>

</actions>

**Rules for goal achievement**

User Names

We parse all the action elements in the file and we gather all the distinct values of the attribute id of element user. These are the identifier of the students.

Goal Names

We parse all the action elements in the file and we gather all the distinct values of the attribute value of element content.property. If the value is not one of the following: “true|false|wait for teacher”, then it is the name of a goal to be achieved.

Goal Colours

The goals initially are painted white.

If the text contents of element description is “checked by system” we paint the goal green

Else if the text contents of element description is “unchecked by system” and the goal is green we paint it orange

**Rules for class dynamics**

Colour

If the text contents of element description is “inactive” and the attribute value of element content.property is “true” we paint the circle amber

Else If the text contents of element description is “feedback shown” and the attribute value of element content.property is “wait for teacher” we paint the circle red

Else we paint the circle green

Goals

We count the number of goals in the task and the goals achieved so far and we display the numbers in the circles.

<preamble>

<users>

<user\_def role="student|instructor" lastname=".." firstname="…" id=".">

<description/> </user\_def> </users>

<objects>

<object\_def type="expresser task">

<description/>

<properties>

<property value="URL" name="HTTP….."/>

</properties>

http🡪task(goals)