An Online Application to Support Self & Peer Assessment

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This online tool will enables students to perform self and peer assessment in team based project work. It enables students to monitor their own, and their peers contributions as specified in an online contract that they commit to at the beginning of the course. The self/peer assessments are compiled into confidential weekly reports for tutors, and used in "tutor-led" peer assessment sessions to investigate the quality and quantity of individual contributions. Using this tool, tutors are able to modify team marks for individuals based on their performance and contributions to the team effort.

This tool offers the following features for administrators, tutors and students:

Administrators	Tutors	Students
Create contract templates	Edit their personal profile	View and edit their profile
Add tutors or extra administrators	View and edit the contracts in their tutorial group	View and edit their teams profile
Add or edit individual students	View self and peer assessment reports in their tutorial group	Create and view their individual contract (tasks & responsibilities)
Add or edit teams	View and edit teams in their tutorial group	Perform weekly self and peer assessment
Reset the system		

The following outlines instructions for:

1. System Requirements (technical staff)

2. Installation of Self/Peer Assessment Tool (technical staff)

3. Administration (academic staff)

4. Tutors

5. Students

1. System Requirements (for technical staff)

The toolset is designed to be an open-source product which should allow you to install it on most systems than have the following system configuration.

•   Apache Web Server   available www.apache.org

•   PHP for Apache, with   available www.php.net

•   MySQL Database Server   available www.mysql.org

The toolset development system used the following configuration…

•   Mac OS 10.1.5 Server

•   Apache/1.3.26 (Darwin)

- PHP 4.2.2, with sablatron XML library   available www.entropy.ch

- MySQL 3.23.39

The toolset has also been tested on Mac OS 10.2.x, with the current PHP 4.2.3 module (available www.entropy.ch), providing the following installation notes have been implemented:

- PHP: Versions of php higher than 4.2.2 require the "register_globals" feature to be enabled. This allows php to pass variable data from page to page.

- MySQL: You should ensure you have a user which sufficient privileges to "create database" before beginning the online installation program.

Once the server has been prepared, and an appropriate subdirectory created, the *wooli.zip* file can be expanded in that subdirectory. The files you will see include errors, default.php, library, install.php, blank.php, homepage.php, tools & graphics.

2. Installation of Self/Peer Assessment Tool (for technical staff)

The *install.php* program must now be run in order to install a single copy of the software tool. If more than one unit, require the use of this software, additional copies of the site files must be copied into different directories, and the *install.php* run from that location. As shown in Figure 1, the server IP, MySQL admin username & password, and desired database name.
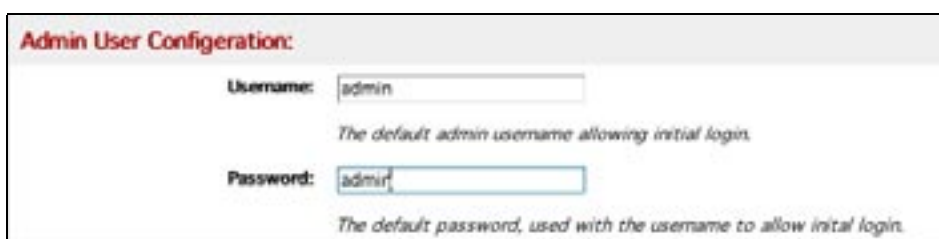

Figure 1: Database Configuration

The administrator's username and password are required (Figure 2)

Figure 2: Administrator's username/password

The start date must be set (on a Monday), as well as the number of weeks. This is required to allow self and peer assessment to take place on a weekly basis – starting a Monday (see Figure 3). Also, the unit name/code is entered here.
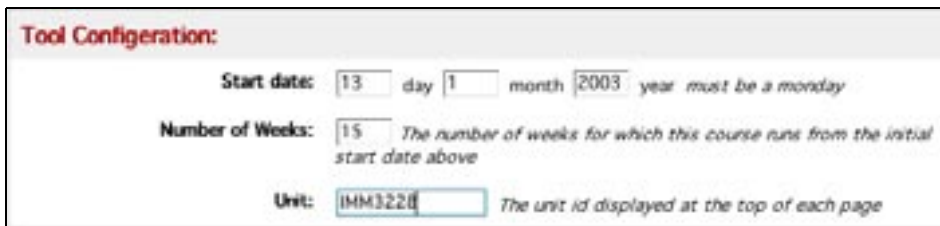
Figure 3: Calendar

At this stage the *[install]* link is pressed and the all the database tables are created, configuration files are generated, and the default administrator is created. Academics then are able to log in as the administrator (Figure 4). Notice that the unit name is displayed in the header. Once generated, access to the site is then available using the *default.php* file. This URL now needs to be passed onto the academic staff member who requested the site eg

http://staffprojects.scam.ecu.edu.au/wooli/default.php along with the administrator's username and password.

3. Administration (for academic staff)

Your technical staff will have provided an URL for you to start the online application such as http://staffprojects.scam.ecu.edu.au/wooli/default.php. Type in this URL, and a screen will appear similar to the one shown in Figure 4.

Figure 4: Login screen

You can now log into the system as the Administrator using the Username/Password provided by the technical staff. Upon login, they will see menu as shown in Figure 5.

Figure 5: Administration menu

In this section each of these menu options will be discussed:

3.1 Contracts

3.2 Manage Staff

3.3 Manage Students

3.4 Manage Teams

3.5 Reset System

3.1 Contracts

The application allows tutors to create contracts that reflect the assessment tasks of the unit. These have been included to help students take ownership of the learning process and clearly communicate their responsibilities within the team at the beginning of the semester. Using these contracts, students are able to negotiate their team roles, major responsibilities, deliverables and project topic. These online contracts are always available as evidence of stated commitments and help with self and peer assessment during the semester.

Pressing the *[contract]* link starts the process (Figure 6). A description is firstly required to help explain the purpose of the contract to students.
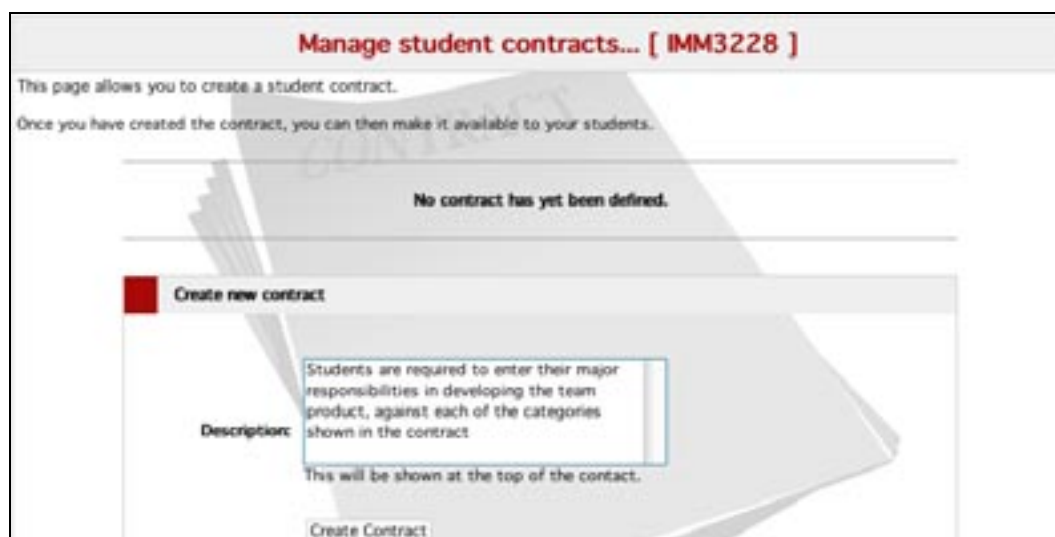

Figure 6: Initiate Contract

Now press the *[Create Contract]* key to continue. The contract management menu now appears (Figure 7).
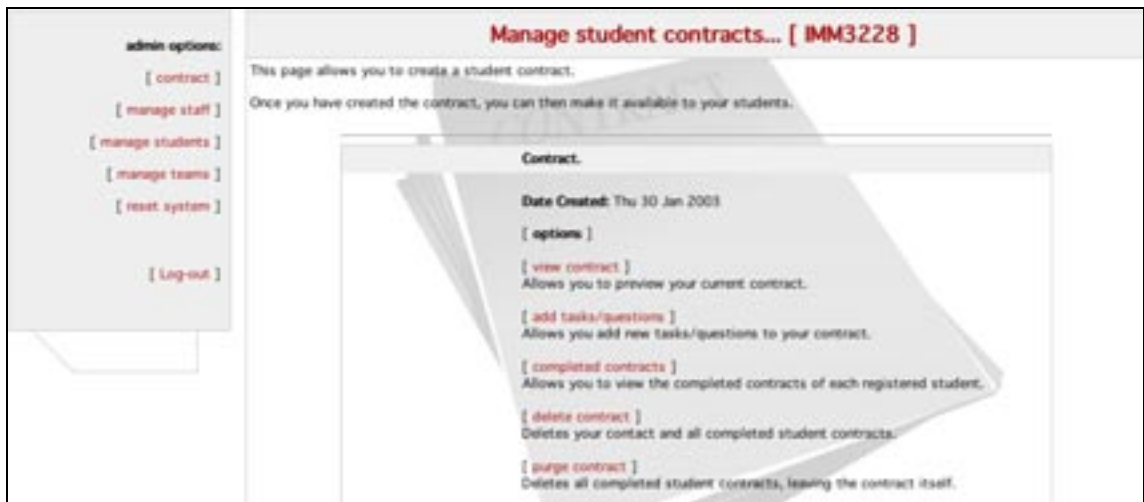
Figure 7: Contract management menu

You can now create the contract by inserting required assessment tasks using the *[add tasks/questions]* link. The sequence, or order of the tasks must is assigned first, followed by the actual task (Figure 8).
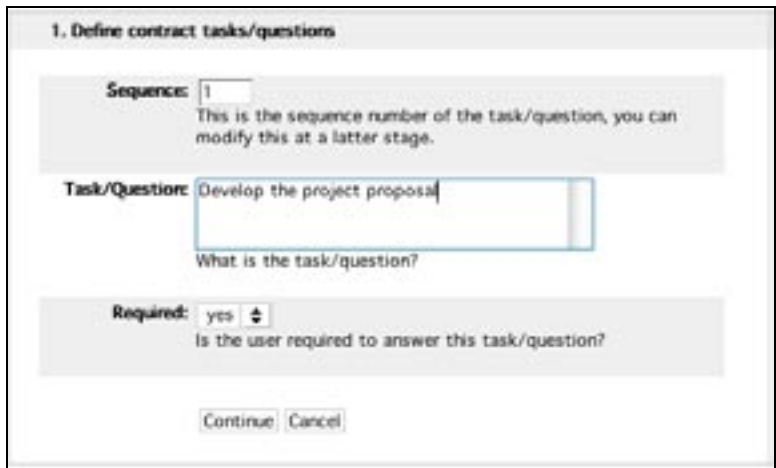

Figure 8: Defining contract template tasks

The task type is then be defined. In most case the "text field" option (more than 200 characters) is used. However, radio buttons, check boxes or menus are also available (Figure 9).
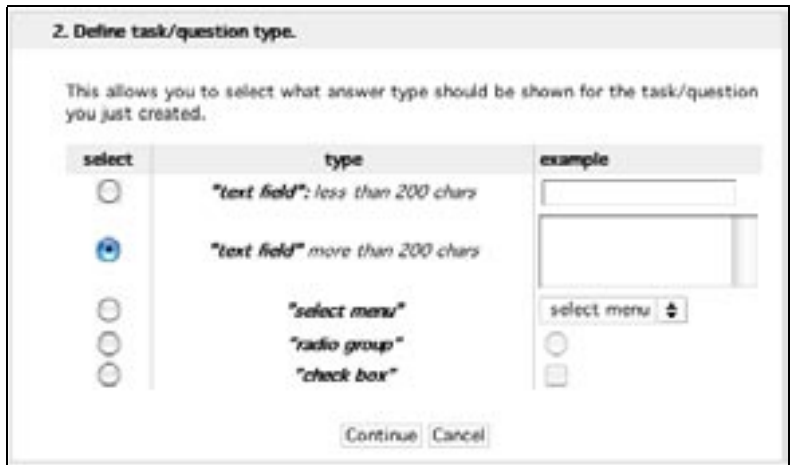
Figure 9: Defining task types

The properties of the selected task types can be changed if necessary (Figure 10). However, in most cases the default values are used. If required, the *"Text box default"* can be used to pre-populate text fields for students, who can then change if necessary.

Figure 10: Task properties

When all the assessment tasks have been entered, the contract template can be viewed using the *[view contract]* link (Figure 11). Alterations to the completed contract tasks can be made using the *[delete]* link. Tasks cannot be edited once submitted they can only be deleted and then re-inserted.

Figure 11: Contract

The *[completed contracts]* link (Figure 12), allows the administrator to view completed contracts of all registered students. Note that these students would have already logged into the system (see section 5 - Students)

Figure 12: View completed student contracts

The Administrator can delete a contract using the *[delete contract]* link. This results in **all** student contract responses along with the contract template itself being deleted. The administrator can also purge the contract using the *[purge contract]* link. This results in **all** student contract responses being deleted whilst leaving the contract template in tact. This may be useful if you want students to practice creating contracts in the first week.

3.2 Manage Staff

A list of all currently registered staff/tutors is provided showing name, username and class (tutor or admin access level). The administrator has authority to enter new tutors details using the *[Add new staff]* link (Figure 13).

Figure 13: Manage Staff

Once all tutors and administrators have been entered, changes to their profiles can be made by the administrator using the *[edit | delete]* option.

3.3 Manage Students

A list of all currently registered students is provided showing name, username and password. The administrator can enter new student details using the *[Add new student]* button (Figure 14). However, most students will enter their own details using the student registration system (see next section).
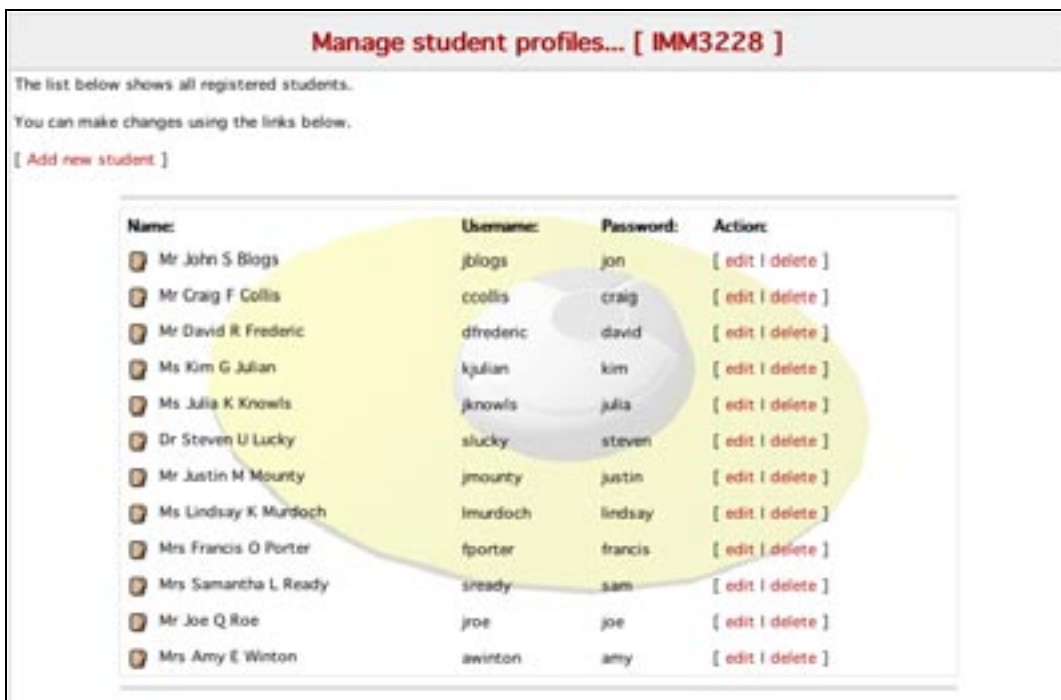
Figure 14: Manage Students

Changes to student profiles can be made by the administrator using the *[edit | delete]* option.

3.4 Manage Teams

A list of all registered teams is provided showing tutor, team name and student involvement. The administrator can enter new teams using the *[Add new team]* button (Figure 15). However, most teams will be created using the team registration system (see section 5 - students).
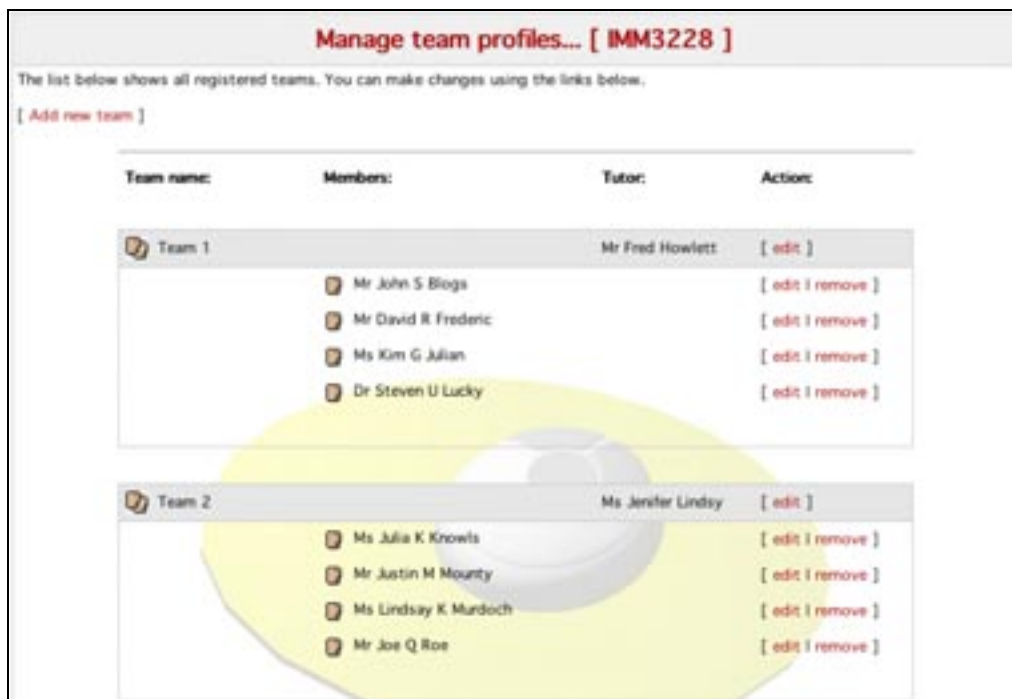

Figure 15: Manage Teams

Changes to team profiles can be made using the *[edit]* button. Changes to individual students can be made using the *[edit / remove]* button. If a student is removed from a team at this stage he/she must be re-assigned using the *[edit]* link.

3.5 Reset System

The administrator can reset the system using the 'Reset System' button. This will remove *****all***** students, tutors, teams, self and peer assessment records as well as all completed student contracts. The defined contract however will remain in tact. Upon system reset you must define the new semester start date and number of weeks for which it will run from the entered start date.

4. Tutors

The tutor can log into the system using the Username/Password provided by the administrator. Upon login, they will see menu as shown in Figure 16.

Figure 16: Tutor menu

In this section each of these menu options will be discussed:

4.1 Personal Profile

4.2 My Contracts

4.3 My Assessments

4.4 My Teams

4.1 Personal Profile

Shows all details of tutor. Includes name, password and all contact details. Tutors can edit or update this profile.

4.2 My Contracts

Shows the tutor a list of all teams with individual students listed against their name (Figure 17).

Figure 17: My contracts

The tutor can view individual contracts by clicking on the *[view]* link. Also, individual student contracts can be deleted using the *[delete]* link.

4.3 My Assessments

This allows tutors to view all the results of the students self and peer assessment for any week, though the current week is made default. This is confidential to the tutor. As can be seen, two reports are provided for each team – *assessments and tally* (Figure 18).

Figure 18: My assessments

By selecting the *[assessment]* link, the following report is generated (only one student is shown in the report shown in Figure 19). Tutors use this report to analyse how each student submitted their own self and peer assessment reports.

Mr John Blogs

Self Assessment:

Posted:	*Thu 30 Jan 2003*
Success:	*+1*
Quality:	*+2*
Time Management:	*-1*
Your comments on completing tasks from THIS week?	*I completed all of this weeks tasks well, however io was a little behind time.*
Tasks to be completed by you for NEXT Week?	*ill try to do better*

Peer Assessment:

Question?	John	David	Steven	Kim
Was he/she/you regularly at group meetings and punctual?	1	-1	1	-1
Did he/she/you collaborate well? (ie. try to assist, cooperate, make suggestions etc)	1	1	1	-1
Did he/she/you complete the assigned tasks for the past week to the best of their ability?	-2	2	1	-1
To what quality did he/she/you carry out the tasks assigned for the last week?	2	1	1	0
Given this team members performance how many marks would you adjust their mark by?	1	1	1	2

Figure 19: Assessment report

Tutors can also select a *[tally]* report, which shows consolidated average scores for each students obtained from their peers (Figure 20). This report gives tutors a quick snapshot of how each team has been assessed by their peers. Note that self-assessment scores are not included in the average score.

Peer Assessment for: Mr John Blogs

Question?	Average	David	Kim	Steven
Was he/she/you regularly at group meetings and punctual?	-0.7	-1	-2	1
Did he/she/you collaborate well? (ie. try to assist, cooperate, make suggestions etc)	0	-1	2	-1
Did he/she/you complete the assigned tasks for the past week to the best of their ability?	1	2	2	-1
To what quality did he/she/you carry out the tasks assigned for the last week?	1.3	2	1	1
Given this team members performance how many marks would you adjust their mark by?	1	1	0	2

Comments: *kim was a little slack, Steve and david weren't too bad.*

Figure 20: Tally report

4.4 My Teams

A list of all registered teams for the tutor is provided showing team name, student members and tutor. The tutor can enter new teams using the *[Add new team]* button (Figure 21). However, most teams will be created using the team registration system (see next section).

Figure 21: My Teams

Changes to team profiles can be made using the *[edit]* button. Changes to student involvement can be made using the *[edit | remove]* button. If a student is removed from a team at this stage he/she must be re-assigned using the *[edit]* link within the student management area.

5. Students

Students need to firstly register their teams, and then themselves, using the *new team & new student* links provided on the home page (Figure 22). This is the same URL used by the administrator and the tutors.

Figure 22: Team/student registration

It is essential that students firstly register their team, and select their correct tutor from the list, before registering themselves. Note that only the team needs only register once! During the registration process, a username is automatically generated by the system. **Students need to take note of this username and password.**

Students can now log into the system using their username & password. Upon login, they will see menu as shown in Figure 23.

Figure 23: Student menu

In this section each of these menu options will be discussed:

5.1 My Profile

5.2 Team

5.3 Contract

5.4 Journal

5.1 My Profile

Shows all details of the student. Includes name, password and all contact details. Tutors can edit or update this profile.

5.2 Team

Shows all details of the student's team. Includes team name, tutor, overview and team email. Tutors can edit or update this profile.

5.3 Contract

Selecting the contract button allows students to view the completed contracts of each of their peers using the *[view]* link. They can also complete their contracts (Figure 24). Once complete, the contract is shown in place of the contract template. Note that once this contract is completed, students cannot make changes to it. Only the tutor can then delete it, and the student can re-do it.

Figure 24: Student contract

5.4 Journal

This allows students to enter their self and peer assessment on a weekly basis (Figure 25). Note that these entries can only be made in the current week, and shows the status of each team member in regards to whether they have completed their self-assessment.

Figure 25: Self/peer assessment

Students can *[complete self assessment]* by clicking on this link (Figure 26). Students must complete the self assessment, before peer assessment is activated.

Figure 26: Self assessment

Once self assessment is completed peer assessment becomes active (Figure 27). After the peer assessment is submitted, students can no longer view any self or peer assessment for that week.

Figure 27: Peer assessment

Summary

Armed with information provided by this online tool, the tutor can now have *tutor-led peer assessment* meetings, in which marks are negotiated between team members. To help promote the fact that this system will be used in the unit, the following entry can be made in the unit syllabus:

> *In this unit there will be much teamwork in which you will have to "carry your own weight" i.e. contributed equitably to the development of the product. A self/peer assessment process is used where students post weekly journal entries on their own and their team members' progress. These reports are CONFIDENTIAL, and can only be seen by the tutor. Based on these confidential student entries and tutor observations, the tutor negotiates the transfer of marks between students at tutor led peer assessment meetings.*

> *For example, if Carol has been working harder than Bill, and this is obvious to other team members, then each week students enter confidential comments through the on-line journal system. The tutor then uses this information in team meetings to help adjust marks through team agreement and negotiation. For example, Carol may be given 5 extra marks and 5 marks are taken from Bill for her extra work (and his lack of work) over the past 3-4 weeks.*