1. Background

In lectures, a partially complete "SW Development Plan" (SDP) for a Library System has been presented – see CA305 web-pages. This plan was based on 1) the SDP template discussed in class, and 2) an outline description of the Library System project.

1.1 Outline description of Library System project

Purpose of the project is to develop and deliver a library system for University X. The system is to comprise of both software and hardware (computers) but will not provide the network infrastructure.

Following a common requirements analysis phase, where use case modelling is to be used, the project will consist of two successive iterations of development. The first iteration will deliver a system for a limited number of key use cases and will also be limited in hardware (server + 4PCs). The second iteration will deliver the complete system, covering the remaining use cases as well as any updates to the iteration 1 delivery, and the remaining PCs. Finally, there will be a period of validation leading (hopefully) to final acceptance by the customer.

2. What's required in the assignment?

2.1 Task 1: Complete "University X Library System" SDP - 4%

One of the main learning outcomes from this assignment is that students should know how to use Microsoft Project, a common project management tool that is available on the School of Computing labs. It is expected that this will be done mainly through independent learning although some pointers will be given in lectures.

The specific task elements are

a) Reproduce in Microsoft Project the contents of Figures 5.1.0-1 and Table 5.3-1 of the Library System SDP distributed to the class.

b) Extend the work of (a) to include the previously omitted Project Management and Configuration management activities; both of which extend over the whole project.

c) Complete a "work package description" for each of the work packages.

d) The results of a) to c) should be presented in the form of a revised SDP (call it **SDP, Issue 1**).

2.2 Task 2: Revise "SDP, Issue 1" (the result of Task 1) – 5%

The work of Task 1 is unrealistic in a number of ways and it is the purpose of task 2 to attempt to improve this aspect.

a) In "SDP, Issue 1" the labour resources are generic (RA = Requirements Analyst, VE = Verification Engineer, SD = Senior developer, JD = Junior Developer, PM = Project Manager, "QA = Quality Assurance (engineer)). Also, the resources are applied at full-time in all cases. So, in this task element, the job is to

- replace the generic resources by named individuals (e.g. RA -> "J. O'Brien (RA)")
- apply resources at varying rates (of your choice); e.g. in "code" activities it might make sense to have a number of junior developers working.

b) Section 5.4 of the given SDP gives only an impression of the budget and resource allocation. In order to convert hours worked to "money" units you must use Microsoft Project to assign hourly rates (of your choice) for each type of labour resource. In addition, some non-labour costs have been excluded so far, notably computer costs but also possibly travel costs associated with doing some of the work at the customer premises. You should use Microsoft Project to specify such costs (at the level you think appropriate). It should then be possible to use Microsoft project to present the total budget for the project but also how the cost is spread over the project lifetime.

c) Similarly to Task 2, the results of a) and b) should be presented in the form of a revised SDP (call it **SDP, Issue 2**).

Note: Students are encouraged to extend other aspects of their plans besides (a) and (b).

2.3 Task 3: Class Presentation – 3%

The assignment shall be carried out by each student individually. On completion, one full lecture period and part of another will be allocated for short presentations by each student of their assignment, including time for some questions.

3. Schedule

1) Deadline for submitting printed documents (SDP Issue 1 for Task 1, SDP Issue 2 for Task 2) is **Friday November 21st at 17.00**. There will be a project box in L1.14.

2) Presentations will take place at the lecture times for **Wednesday November 19th** and **Thursday November 20th** (2008). The order of presentation will be random.