

SYSC 4106 (94.416) – Fall 2002: Assignment-2:- Group Work

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**Due: For presentation in class
starting from Nov. 14**

Group One

Model the following software system using UML notation.

The software system to be produced is a time monitoring tool, which will be referred to as “TMT” throughout this exercise. The time monitoring tool will allow developers working within a defined software development process to record the time they spend on the various software development activities, such as designing, coding, testing, and debugging. The TMT will also allow a manager to derive analyses and produce reports based on the data entered in the system.

The TMT could be used in any software development application to record the resources expended on the various software development activities being carried out. The goals are manifold depending on the users of the data. The managers use data recorded from TMT to validate the planning, budgets, and schedules of a software project. The software process manager uses data from TMT to better understand the various software processes and prescribed practices, and to guide software process improvement concerns.

Group Two

Write a project plan for a time-monitoring tool. Be careful not to forget all the other important project management artifacts. Find one or more tools that could help the project manager to do his or her job. Explain the usefulness of those tools. Moreover, consider the following:

- The duration of the project is about six months.
- Two months after the beginning of the project, the analyst is laid off.
- In the inception phase, some significant modifications will be made to the requirements.
- A software engineering student joins the development team after four months as programmer.

Group Three

One of the costliest software errors occurred on June 4, 1996, when the European rocket ARIAN 5 was destroyed 30 seconds after departing on her maiden voyage. The reason for this catastrophe was linked to a lack of rigor in the software development process. Download the ARIAN 5 report from the internet. Using some of the concepts (quality, risks, planning, measurement, testing, etc.) presented in class, identify the problems that were related to the development process and suggest possible solutions.

Group Four

On the Internet, find testimonies of teams in every application domain and evaluate the quality of the team in terms of the factors that define a good project team. There are a lot of historical project teams such as the DNA and HIV discovery or many NASA projects. Pick one and discuss it.