**Scrum and How It will be Applied to the Ubertool Project**

Scrum is a simple project management tool that helps software development teams organize and manage their goals, tasks, and responsibilities.

Some general guidelines for its implementation are below:

I. Roles:

A. Product Owner (Tom) - The Product Owner has the responsibility of guiding the Sprint Goals, creating Product /Sprint Backlog items and their priorities, and developer time allocation, as well as being the external representative of the group. He attends all Scrum meetings.

B. Development Team (Tao, Tom, Marcia, Chance, Flash) - This team has responsibility for not only developing, testing, and documenting the code/products associated with the current Sprint Goal, but also determining which Product Backlog items will be placed into the Sprint Backlog, determining the order of their completion, time estimation, and who is responsible. Members of this team have specific strengths but are not labeled as anything but Developer, this means that while they can lend their expertise -- associated development is not given to them defacto.

C. Scrum Master (Chance) - The Scrum Master is the educator on the process of Scrum and ensures that all necessary meetings and related tasks are completed. He ensures that the Sprint Planning, Daily Scrum, Review, and Retrospective meetings are the appropriate length of time, cover the appropriate material, and always occur.

II. Terms

A. Sprint - The time interval between product releases. It is either a month or 4 weeks long (hint: The Product Owner makes this decision).

B. Sprint Goal - As the name states, the single goal or one of a small set of goals that has been set as the driving force for all Sprint Backlog items. This will be determined at the Sprint Planning Meeting and determined if it was achieved at the Sprint Review.

C. Sprint Backlog - The list of items that will be completed during the current Sprint. Backlog items will be assigned to individuals (or groups), with priorities, order, time estimate, and expected completion date. These are assigned to a Sprint during the Planning Meeting and are most often from the Product Backlog.

D. Product Backlog - The list of all items that are hoped to be developed for the product. These items often are initially fairly general and of low priority with little detail. Most of these items are originally generated by the Product Owner or based on another item that he has created.

E. Pair Programming - An Extreme Programming (XP) methodology that promotes all coding is done by two developers. It has been shown to be highly effective and generate higher quality software that has less bugs.

III. Meetings:

A. Sprint Planning Meeting (1st day of Sprint) - Anywhere from 1-4 hour meeting which has two major parts:

1. What is getting done? The Sprint Goal(s) is(are) chosen and should be achieved by the end of the current Sprint. Each item that will be placed into the Sprint Backlog for the current Sprint is determined and should support the Sprint Goal.

2. How it gets done? The order, priority, time estimates, responsible parties are assigned to all Sprint Backlog items, as best as possible.

B. Daily Scrum - A daily 15 minute meeting that is open to all product developers. This is not a product status meeting, but focuses on individual team members. Team members state the following 3 things related to their work on Sprint Backlog items:

1. What she/he has done since the last meeting?

2. What he/she will do until the next meeting?

3. Any obstacles?

C. Weekly Pair Programming Session (Optional, currently every Tuesday at 3pm) - A voluntary 1-2 hour session at teaming area, such as a conference room or coffee house. Developers can work on problems in small groups or work on algorithms/design.

D. Sprint Review (before the Sprint Retrospective Meeting) - This meeting 1-2 hour meeting (can be combined as part of a longer meeting with other Sprint meeting) that has the aim of finding out was done and not, review quality, etc. The Product Owner has the final as to say as to whether the Sprint Goal or specific Sprint Backlog items were completed. Code reviews can occur during this meeting. Demonstrations of capabilities often take place here, as well as discussion of unit and regression testing results.

E. Sprint Retrospective (before the Sprint Planning Meeting) - This meeting has the aim of honing the team’s Scrum technique.