ICS 414 Fall 2016 Team Assignment

The general idea is to create a software system to aid software developers – individually and as a team - use two common techniques: Pomodoro (usually individual) and Kanban (usual team).

For background information look at the links in this directory. If you google it, you'll see much about Pomodoro and Kanban as they relate to software development. Yes, I know there are already a million Pomodoro apps. Are there Pomodoro and Kanban add-ons to development environments like Eclipse? Good question. How do they relate to git? Good question.

Consider this team assignment as your chance to show you understand, or are beginning to understand, running a software development project from inception to fruition.

What I mean is – whatever you come up with, I want you to focus on software engineering. Plan, design, and yes – code, but collect data, and have something that does something useful at the end. It doesn't need to be fancy, it needs to be well done. In software engineering this means on-time (meet the deadlines), under budget (you only have three people working on it very part time), extensible and maintainable (well designed), and of course does something. But for this project I would substitute minimal "does something" for you to do the rest of it right. I would rather see better and well documented design and testing than lots of code that is thrown together at the last minute.

Team Deliverables
I will create teams of three students per team. Participation by everyone is not only expected, but necessary. We will be assessing participation through the check-ins with the TA, peer assessments, and my observation about how things are going.

Team assignment 1: brainstorming, requirements, and feasibility (5 points, due by end-of-day **30 September**)

As a team, each person will submit via Laulima the same pdf document describing:
- The interface your team has decided to paper prototype. This assumes your team has discussed the team members' brainstorms and drawings.
- The questions you hope paper prototyping will answer and the data you will collect from the users of the paper prototype
- Initial estimates of number of LOC, and how you will test functionality at the end.
- Aspects or features of your proposed system that will distinguish it from others.

You can develop a mobile app, web app, standalone program, Eclipse extension, or some combination.

At least three pages, no more than 10.

Team assignment 2: Deliverables will be the results of your team's paper prototyping.   (6 points, no later than **14 October**) You will also turn in what kinds of interface you are developing (phone/tablet app, web page, stand alone Java app, combination …). Every person on the team turns in the same pdf document. At least three pages, no more than 10.

Team assignment 3: check-in with TA (5 points, **no later than 28 October**)
As a team, F2F or online, teams will check in with the TA to discuss your software design, testing approach (both unit- and system tests).

Team assignment 4: check-in with TA (6 points, **no later than 10 November**)
As a team, F2F or online, you shall demonstrate to the TA running code, even if it doesn't do much. You will also discuss with the TA your software engineering data to-date, including: LOC implemented, revised LOC estimated (any changes to your original estimate), git activity statistics (each team member needs to participate in git), schedule changes, size of test suites.

Team assignment 5: finale (8 points, no later than **2 December**)
You will turn in the URL for a five minute, narrated video demonstration of your system you developed. In addition to the demonstration, discuss lessons learned – good and bad – about the software engineering of your system.

There is also an individual portion to the finale: Each team member will also turn in **their own** project post-mortem wrap-up document discussing: the final software engineering data, ideas for future enhancements of the system, and suggestions about what you would do differently next time. Pdf, at least two pages, no more than four pages.