Get ready to show off your newly acquired knowledge of Machine Learning.

* **What you will do:** Form a team and complete a machine learning project. Present your project (as a team) on the last day of class. Please plan ahead and work towards this deadline.
* **Teams:** Form your own teams of 5-7 students per team. No less than 5, no more than 7. A total of 6 teams have to be formed. To join a team, go to the navigation link called "People" in Canvas. Click on the "FINAL PROJECT" tab near the top. You will see 6 teams with interesting names. Join any team with fewer than 7 students. Feel free to encourage your friend to be on your team. By the way, should you look up the team names by searching the internet for "machine learning <name>", you might be inspired by who your team is named after.
* **The project:** Must contain a classifier specifically designed by the team. **Downloaded programs are not acceptable.** Simple classifiers are perfectly acceptable, especially if they illustrate topics covered in the assignments.Your project need be only about 25% more complex than the assignments in the course.
  + You may use your team's work-space within Canvas to communicate and discuss project matters with your fellow team members. Use your discretion to employ any other means of working together to complete the project
  + The report (one per team) must contain Objective, Method, & Results. **The PPT which you will use to present is your report**
  + Make sure you include notes on training data preparation (as applicable), classifier design and evaluation. **Please make sure you use a testing set for evaluation.**
  + Do not present code, except (optionally) to briefly call attention to interesting points. Please feel free to ask me if you have any questions
* **PRESENTATION:** Please be prepared to present clearly and succinctly, with each team taking NO MORE THAN 20 MINUTES. This includes time for questions from the audience and instructor. Other than your presentations, we must have time left over for a few other administrative matters
* **TOPICS:** Looking for a topic? Here are some suggestions:
  + Pick up a completed assignment and extend it (\*\*\*preferred method\*\*\*). For example, build a 10-class classifier using the MNIST database. Or try Expectation Maximization on MNIST
  + Try NMNIST, available on [numericinsight.com/Downloads](http://numericinsight.com/DOWNLOADS.php) (You will need Read\_NMNIST)
  + Try the [UCI machine learning repository](http://archive.ics.uci.edu/ml/datasets.html) to get some ideas
  + Provide PPT slides for teaching ML concepts that clearly improve on existing slides in the server
  + Check with me if you have other ideas that will demonstrate the fact of having learned, and being able to effectively apply topics covered in class