

# CS590BD Big Data Analytics and Apps

## Fourth Increment

**Due: July 28 (M) 2014, Noon**

The class project is to be based on *Agile* development techniques. In the first stage, each group has proposed a rough idea of the project they will work on this semester. This can be refined throughout the semester. For each increment hereafter, each group will deliver a set of outcomes related to their project.

The tentative schedule for project development is as follows:

- ~~First Increment: June 20 (F)~~
- ~~Second Increment: June 30 (M)~~
- ~~Third Increment: July 11 (F)~~
- Fourth Increment: July 28 (M) ← this deadline
- Project Video: July 28 (M) ← this deadline
- Project Presentation: July 29 (T) & July 31 (Th)

Each group submits the following items before the submission deadline

- (1) Fourth increment project (source code, data, report etc.) to their project Github
- (2) GitHub Fourth Increment link to  
[https://docs.google.com/spreadsheets/d/1AokAxbj\\_rE2FM1S5omEhABqQpKXSXXXKAnA7I2gzul/edit#gid=0](https://docs.google.com/spreadsheets/d/1AokAxbj_rE2FM1S5omEhABqQpKXSXXXKAnA7I2gzul/edit#gid=0)
- (3) Post your video Youtube Link to  
[https://docs.google.com/spreadsheets/d/1AokAxbj\\_rE2FM1S5omEhABqQpKXSXXXKAnA7I2gzul/edit#gid=0](https://docs.google.com/spreadsheets/d/1AokAxbj_rE2FM1S5omEhABqQpKXSXXXKAnA7I2gzul/edit#gid=0)

### Fourth Increment Report

- Project Goal and Objectives
  - Motivation
  - Significance
  - Objectives
  - System Features
- Online Application: Game by Motion
  - Devices/Sensors
  - Motion Models
  - Game Logic/Features
  - Recognition/Analysis Approaches (Workflow, Algorithms, Input/Outputs)
  - System Features and Android App GUI (screen captures)
- Offline Application: Activity Report
  - Devices/Sensors
  - Activity Models
  - Features
  - Recognition/Analysis Approaches (Workflow, Algorithms, Input/Outputs)
  - System Features – Software Architecture, HBase Design and Android App GUI (screen captures)
- Evaluation: Motion/Activity Recognition
  - Number of Users
  - Types of Motions/Activities

- Size of data, Number of Gestures
  - Data Preparation (e.g., Cross Validation)
  - Accuracy – Precision/Recall/F-Measure
  - Limitations
- Project Video
  - Produce a video on your project (Up to 5 minute)
  - Refer to Tutorial 11 on video production
  - Post it to Youtube and share the link
- Related Work
  - Projects done by others (include the URLs in Bibliography)
- Project Planning with Scrumdo (optional)
- Bibliography