

CIS 410/510: Project #2  
Due October 10<sup>th</sup>, 2015  
(which means submitted by 6am on October 11<sup>th</sup>, 2015)  
Worth 7% of your grade

Assignment:

- 1) Download skeleton file proj2.cxx and file data\_proj2.vtk and put them in a new directory.
- 2) Re-use your from CMakeLists.txt ... copy it to a new directory and rename "proj1" to be "proj2".
- 3) Compile the program and run the program. It will generate incorrect output.
- 4) You will need to implement three functions to make it generate the correct output (search for "IMPLEMENT ME!")
  - a. I would recommend you implement them in the following order:
    - i. BoundingBoxForCell
    - ii. CountNumberOfStraddlingCells
    - iii. EvaluateFieldAtLocation
- 5) Compare the output with the output I posted. Keep in mind that not all function invocations have valid arguments. GetBoundingBox returns [-100 → +100, -100 → +100] for invalid cell indices and EvaluateFieldAtLocation returns 0 for invalid locations.
- 6) Upload a screenshot of your output and your source code when it works.