Programming Assignment #2

Basic Matrix Multiplication

Date: __/__/2015	***Due***: __/__/2015
Grade: 100 points	***Hard Deadline***: __/__/2015

Write a CUDA program that implements the basic dense matrix multiplication kernel. Make sure you handle the non-regular dimensional inputs (not square or multiples of 2) of rows and columns.

Testing:

- Allocate the required memory for three matrices (two input matrices and one output) on the CPU and GPU sides.
- Fill the input matrices with initial data and assign valid dimensions to them, that is, if we have two matrices A and B, the number of rows in A must equals the number of columns in B.
- Write a sequential CPU version and test the matric multiplication and see if results are correct.
- Write the basic parallel GPU version and test its output with the CPU counterpart.

Submission Instructions:

- Submit your program to CSE327_CUDA@gmail.com before deadline. Answers submitted due the hard deadline will get only %80 of the grade.
- Subject of message must be { **CU_PA2** }
- You must use the given templates while writing you programs.
- Attach your code files only; don't include any documents or pictures.
- Any violations to previous Instructions will cause your assignment to be rejected.