

CDA 4203 Sec 001
Computer System Design
Spring 2015
Instructor: Dr. Srinivas Katkoori
Homework 1

Assigned on Wednesday 7th January
DUE: 11:59:59PM, Wednesday 14th January

Note:

- 1) Recommended submission is by Canvas.
 - 2) If you handwrite the answers, you may want to scan and upload to Canvas in PDF format.
 - 3) Answer the questions in the same order.
 - 4) No teaming allowed.
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Pick your *favorite mobile* computer system (eg., MP3 player, PDA, smart phone, XBOX, digital camera, camcorder, etc.) and answer the following questions:

- (1) What are the generic and model names of the system?
- (2) What are the main components of the system you have chosen?
- (3) List the functional requirements of the system?
- (4) Provide relevant details for the following in your system?
 - a. Processor Details (name, MIPS rating, speed, type, etc.)
 - b. Memory (capacity, read/write speeds, etc.)
 - c. Input Interfaces
 - d. Output Interfaces
 - e. Other components
- (5) Provide details of the system properties:
 - a. Average power consumption
 - b. Clock speed
 - c. Form factor (size and weight)
 - d. Throughput (relevant to user)
 - e. Any other relevant properties
- (6) When was this product launched and by whom?
- (7) Provide the product family details (i.e., predecessors versions, launch dates, functions)
- (8) Is excessive power consumption an issue with the product? If so, any low power features incorporated into the product?
- (9) What makes this computer system, your *favorite* system?
- (10) Given an opportunity, briefly describe what features will you *re-design* and why?

For this homework, you are allowed to use internet search engine(s) to conduct research and gather data. You can also refer to user manual(s) of the product. Properly cite all your sources.