ENG 470 - SYSTEMS ENGINEERING PROJECT #3

PRELIMINARY SYSTEM DESIGN OF THE "REDBOX" AND DETAILED SYSTEM ARCHITECTURE SIMULATION WITH MATLAB

In this project, the students will develop a "Preliminary System Design" for the "Redbox".

1. Continue working with the requirements for the Redbox, and this product and business model in general.

2. Write a report, which will be due by the date announced in class, containing the following deliverables:

   a. **(1)** Development Specification (Type B).

   b. **(1)** Documentation of the Identification of Resource Requirements.

   c. **(1)** Documentation of the Functional Packaging into Major Elements.

   d. **(1)** Documentation of the Requirements Allocation.

   e. **(1)** Documentation of the Systems Analysis.

   f. **(4)** Documentation of the usage of Matlab Stateflow to draw a Functional Block Diagram for the system and subsystems, and simulate all levels of architectural behavior of the system. **Submit all Matlab work!**

3. GRADING RUBRIC: The total grade will be 9 points normalized to 100% for your report. Each of the deliverables outlined in points a through f in (2) are worth the number of point indicated within parentheses.

4. REPORT FORMAT: Free form, but it must be:

   a. One report per student

   b. Have a cover sheet with identification: Title, Class, Your Names, etc.

   c. COMPLETELY word-processed

   d. Double spaced

e. 12 pt Times New Roman font

f. Fully justified (optional)