

CS 531 Requirements Statement

The basic problem is to translate the old style requirement specification for the Viking Mars Lander Guidance Control Software (GCS) into the format specified by the IEEE Std 830-1998 (see the SRS Tailoring Guidelines). The first task will be to review the documentation to familiarize yourself with the baseline. After a preliminary analysis you will *provide a top-level set of requirements and project plan*. A draft of your SRS will be due in week seven. The top-level requirements should clearly state what you are going to address and any things that will be viewed as out of scope.

1. Deliverables (see IEEE standards and tailoring guidance)

Top Level Requirements and Project Plan (Week 4)

Draft SRS (Week 7)

SRR Presentation (Week 9)

Final SRS (Week 12)

Draft (optional) and final Design Notebook (Week 14 and 16)

2. Development Environment on the PC

MS Word 97-98

3. The functionality of the GCS specification

The specification shall include the functionality of all components shown in Figures 3.1 and 4.1.

4. Constraints

After a preliminary analysis of the GCS Specification each team will develop a project plan to ensure the following. How to handle the finer detail so that the result conveys the existence (i.e., function, structure, dependencies and behavior) of equations (without having to actually specify them). The idea is not to erase but to abstract the critical characteristics in terms of function, structure, timeliness and correctness).

5. Performance Requirements

There are no specific performance requirements.

6. Design Constraints

Each team will describe in their plan what aspect of the SRS they will actually design and deliver in the form of a design notebook. The design methodology is negotiated with the instructor.

7. Software System Attributes

The abstract and introductory sections of the SRS should clearly identify the kind of system (e.g., transaction based, real time embedded, etc.) and give some fairly good detail of the consequences with regard to the domain. For example what defines correctness, and how are the ilities associated with quality impacted and handled.