1. Goals

In this phase you are to layout the architecture of the system. The system architecture document will include the following sections:

- An updated requirements table (with the cross references filled out)
- System deployment model
- Software Architecture Description

You should prepare the sections as shown in the RoboLib example project. You should also include previous submissions as part of your current submission. Previous submissions are not graded, but are used to check that your current submission is consistent with your previous submissions.

2. Responsibility Distribution

The tasks should be distributed uniformly among the members of the group. You are required to describe the responsibility of each member in executing the phase. Define the role and actual work of each member, in the level of functional responsibility: each member is responsible for some modules and/or functionality and perhaps some development task, such as document integration, internal reviews, etc of the system.

3. Submission

Submission Due Date 6.5.2010 until 23:59.

You should submit a system architecture document containing the sections described in the project goals. The requirements document you hand in must also include a filled out bi-directional traceability table to indicate consistency with the current phase. The document (including previous submission) should be printed and submitted as one coherent document containing multiple sections, and also submitted electronically in pdf format via the course website. The submission should also include a cover page including the group name, and the names and ids of all group members, and also the number of cell to return the checked exercise to. You should use the RoboLib documents as a reference for the format of the submission (diagrams, tables etc.).
Please inform Roy (royl@cs) of any problem, and in particular Miluim, as soon as such issues arise.

3.1 Bi-directional traceability

Extend the requirement table to include forward traceability columns. These columns should indicate for each relevant requirement which deployment and software architecture artifacts address it (if there are any). Architecture artifacts should trace back to their relevant requirements, as specified below.

3.2 System deployment model

The section should include the following artifacts:
- System Deployment Diagram
- Hardware Configuration Items (HWCI) table:
  - Name
  - Description
  - Traceability to requirements
- Computer Software Configuration Items (CSCI) table:
  - Name
  - Description
  - Traceability to requirements
- Interfaces table
  - Connected items
  - Contents
  - Medium / Protocol
  - Traceability to requirements

3.3 Software Architecture Description(s)

You should provide this section for each software product you must develop. Each such section should include the following artifacts:
- Component Diagram
- Component / Interface Description table
  - Name
  - Role
  - Interfaces
    - Kind (required / provided)
    - Name
    - Description

Also, this document should include a complete software architecture diagram, showing how software components delegate their interface to hardware interfaces via ports (see the last diagram in the RoboLib SAD document for reference). Make sure to obtain complete consistency between the hardware and software architecture, i.e. each external software interface has a corresponding hardware interface.

Good luck!