Group 10   Amit Maole
                                            Brent Eskridge
                                            Klo Utley
                                            Tony Lopez

PROJECT 3: TASK ALLOCATION REPORT

We have decided to continue using the organization we created for Projects 1 and 2. It served us well for those projects and we see no reason not to keep using it.

The project is divided into the following tasks:

1. *__DESIGN__:* The design task will consist of a group brainstorming session where we will discuss potential designs, weigh the pros and cons of each, and compromise on a final design. Project requirements, software/hardware limitations, and creativity will dictate the nature of the final design.

Note: In phases 2 – 5, we have decided on the following organization strategy:
- Each task will be allocated to two group members.
- One member will be designated Primary and the other Secondary.
- The Primary member will carry the responsibility of completing the task and will have final authority in making decisions related to the task.
- The Secondary member will assist the Primary member in completing the task.
- Each group member will be assigned as the Primary in one task and the Secondary in another task.
- The reasoning behind this organization strategy is that each group member is interested in learning as much as possible about each aspect of robotics design and implementation. This strategy allows each group member to participate in each task twice, but still provides the task rotation prescribed by Dr. Hougen.

2. *__HARDWARE__:* The Hardware task takes the final design from the design phase and creates a robot capable of completing the desired tasks. This includes building the robot chassis, affixing the sensors and motors to the chassis, attaching the sensors and motors to the Handy Board, and securing the Handy Board to the chassis.

3. *__SOFTWARE__:* The Software task takes the final design from the design phase and creates an Interactive C program that uses the sensors and motors to accomplish the desired tasks. Attention will be given to both easy readability and good coding standards. To facilitate the learning process for each group member, when the software is complete, we will have a code review. For the code review, the whole group will look at the code together, search for errors, and make sure everyone has a working knowledge of how the code works. This will be important in future projects as group members rotate into the software task.

4. *__TESTING__:* The Testing task will consist of a two- to three-hour period of rigorous testing. The robot will be tested against every imaginable anomaly and/or parameter to determine its ability to function consistently. Examples of anomalies/parameters include: the level of lighting in the room, the amount of grime on the floor, how precise the movements are, etc.

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5. *__MANAGEMENT__:* The Management task will be responsible for keep track of progress during the project, managing deadlines, preparing the final report and leading the presentation. If at any time during the project, there is a "collision of thoughts", then the primary project manager will make the decision.

6. *__PRESENTATION__:* The group members will give a brief overview of their primary task including goals, problems encountered, and results.

Task Allocation by Task:

Hardware:
  - Primary – Amit
  - Secondary – Klo

Software:
  - Primary – Brent
  - Secondary – Tony

Testing:
  - Primary – Tony
  - Secondary – Amit

Management:
  - Primary – Klo
  - Secondary – Brent

Note: The Testing and Management tasks are both comprised of one person from hardware and one person from software. In the testing task, this allows for easier fixing of problems or errors in either the hardware or the software. In the management task, this division makes the creation of the final report easier since there will be a complete understanding of the hardware and the software implementations.

Reasons for Task Allocation:

We determined who would be in what position based on the following two rules:
  1. The Primary would become the Secondary of the corresponding task (Hardware/Software and Testing/Management).
  2. The Secondary of each task would become the Primary for that task.