Milestones, Timeline, and Effort Matrix

The Medicine Delivery Robot

Brock Stechschulte, Anthony Dietz, and Kevin Blount

Thesis Advisor: Janet Dong

Milestones List:

1. **10/21/19 Acquire Parts:** Have all parts purchased and delivered to us. Also begin to work on drive train design.
2. **12/1/19 CAD Design:** Finalized computer-aided design for drive train section and begin work on programming.
3. **12/21/19 Web Application:** Web application UI is complete. And we are able to access the website.
4. **2/1/20 Robot Movement:** Working drive train, begin work on storage compartment. Will be able to drive around, position the robot in a room, and detect obstacles.
5. **3/1/20 Robot Storage:** Finished storage compartment and working camera.
6. **3/23/20 Finished Medicine Delivery Robot:** From here on out, time will be focused on debugging small issues and preparing for tech expo.
7. **4/9/20 – Tech Expo Presentation:** Present our medicine delivery robot at the tech expo. Show that our robot is able to successfully deliver medicine to a patient.

Task List:
1. Research sensors to incorporate on robot (Kevin)
2. Research robot design (Anthony)
3. Investigate possible design concepts (Anthony)
4. Finalize design concept (Anthony)
5. [Milestone 1] Obtain robot parts to begin working on drive (Kevin)
6. [Milestone 2] Finalized CAD design for drive train (Anthony)
7. Research development design of robot (Brock)
8. [Milestone 3] Complete web application (Brock)
9. Develop code for robot's drive train (Brock)
10. Design storage compartment (Kevin)
11. [Milestone 4] Complete Robot Movement (Anthony)
12. [Milestone 5] Complete work on storage compartment (Kevin)
13. Develop code to open/close storage compartment (Brock)
14. Implement sensors and camera (Kevin)
15. Validate development is complete (Anthony)
16. [Milestone 6] Validate robot functionality is complete (Brock)
17. Refine and test robot (Brock)
18. [Milestone 7] Tech Expo Presentation (All)

Timeline and Effort Matrix:

Task ID	Start	Finish	Primary	Kevin's Effort	Anthony's Effort	Brock's Effort	Progress
1	09/15/19	10/12/19	Kevin	90%	10%	0%	100%
2	09/15/19	10/02/19	Anthony	50%	50%	0%	100%
3	09/28/19	10/08/19	Anthony	60%	40%	0%	100%
4	10/15/19	11/01/19	Anthony	70%	30%	0%	100%
5	10/16/19	10/21/19	Kevin	40%	40%	20%	100%
6	11/01/19	12/01/19	Anthony	75%	25%	0%	100%
7	11/01/19	12/01/19	Brock	0%	0%	100%	100%
8	12/01/19	12/30/19	Brock	0%	0%	100%	90%
9	01/09/20	02/01/20	Brock	0%	0%	100%	0%
10	01/15/20	02/12/20	Kevin	90%	10%	0%	20%
11	01/16/20	02/01/20	Anthony	0%	100%	0%	0%
12	02/13/20	03/01/20	Kevin	80%	20%	0%	0%
13	03/01/20	03/23/20	Brock	0%	0%	100%	0%
14	03/04/20	03/15/20	Kevin	50%	40%	10%	0%
15	03/20/20	03/24/20	Anthony	20%	80%	0%	0%
16	03/20/20	04/01/20	Brock	0%	0%	100%	0%
17	04/01/20	04/08/20	Brock	33%	33%	34%	0%
18	04/09/20	04/09/20	All	33%	33%	33%	0%