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EX-Bots
 Progress Report #4
 1/17/2006

Website URL: http://www.ce.rit.edu/research/projects/2005_winter/rt_ex-bot/

Project Description: The objective of this project is to create a robot that will be capable, with the assistance of a PC, of mapping an area, approximately 15 feet by 15 feet, then navigating the mapped area. The system will have a java-based user interface with a display of the mapped area and some controls and will communicate via Bluetooth v1.1 compliant modules. The robot will make use of ultrasonic sensors, a magnetic compass, and infrared phototransistors for mapping and navigation.

Project Timeline and Milestones:

Notes:

Dark Grey background: Completed

Grey background: Past Due

“None” in the Old Completion Date means that it is a new task

(These notes apply to all tables)

Item Description	Primarily Responsible Member	Old Completion Date	New Completion Date	Comments
Setup User Interface	ME	12/6/2005	No Change	
Finalize Project Algorithms	ALL	1/12/2006	No Change	
Conclude Bluetooth Research	ERS	12/16/2006	No Change	
Create Website Template	ERS	12/13/2005	No Change	
Aquire All Hardware	TCL	12/16/2005	No Change	
Implement Buttons/Map Function	ME	12/16/2005	No Change	
Test Component Functionality	TCL	1/12/2006	No Change	
Implement Mapping Software	ME	1/13/2006	1/31/2006	
Construct Robots	TCL	1/14/2006	No Change	
Write Avoidance Alrorithm	TCL	1/13/2006	No Change	
Rewrite Project Proposal	ERS	None	1/20/2006	
Implement Packet interface	ERS	1/12/2006	1/31/2006	
Test Avoidance Algorithm	TCL	1/15/2006	1/31/2006	
Write Path Finding Algorithm	ME	1/14/2006	1/31/2006	
Test User Interface Functionality	ME	1/15/2006	1/31/2006	
Test Path Finding Algorithm	ME	1/20/2006	1/31/2006	
Find New Java Interface Tool	ME	None	1/31/2006	Japplet won't function in Jpanel
Update website	ERS	None	1/31/2006	
Test Terrain Mapping	ALL	1/31/2006	No Change	
System Functionality Testing	ERS	2/10/2006	No Change	
Write Final Report	ERS	2/15/2006	No Change	
Demo Poster	TCL	2/17/2006	No Change	
Team Assesments	ALL	2/22/2006	No Change	
Finish Website	ERS	2/24/2006	No Change	

Items completed for this report:

Item Description	Primarily Responsible Member	Old Completion Date	New Completion Date	Comments
Finalize Project Algorithms	ALL	1/12/2006	No Change	
Aquire All Hardware	TCL	12/16/2005	No Change	
Test Component Functionality	TCL	1/12/2006	No Change	
Construct Robots	TCL	1/14/2006	No Change	
Write Avoidance Alorithm	TCL	1/13/2006	No Change	

Items to complete by the month's end:

Item Description	Primarily Responsible Member	Old Completion Date	New Completion Date	Comments
Rewrite Project Proposal	ERS	None	1/20/2006	
Implement Mapping Software	ME	1/13/2006	1/31/2006	
Implement Packet interface	ERS	1/12/2006	1/31/2006	
Test Avoidance Algorithm	TCL	1/15/2006	1/31/2006	
Write Path Finding Algorithm	ME	1/14/2006	1/31/2006	
Test User Interface Functionality	ME	1/15/2006	1/31/2006	
Test Path Finding Algorithm	ME	1/20/2006	1/31/2006	
Update website	ERS	None	1/31/2006	
Test Terrain Mapping	ALL	1/31/2006	No Change	

Comments, Questions, and Difficulties:**Difficulties:**

Discovered that a JApplet won't function inside a JPanel, which means that we must find a new method of displaying the map aspect of the interface. A PGM format image file was suggested.

Comments:

Rather than spending the time putting together a specific list of due dates between now and then, I felt it simpler and still appropriate to state that we need to be caught up to the original schedule by the end of this month. This means that technically only the rewritten report is due next progress report. Obviously, however, we will endeavor to have multiple more items complete by that time.