

MIDTERM PROGRESS REPORT

IPRO 353 - THE PEPPY ROBOT (AN ENTREPRENEURIAL IPRO PROJECT)

Project Goals:

In this Project, Our goal is to create an educational robot, which can be useful to the High School students as well as College students in their practical work during their course subject and will be able to create successful market for that product. Also, we have to consider that how can we get the maximum profit by putting minimum cost and how can we make our product an attractive in the market by which more customers will attract toward it to buy it.

Team Organization:

As in this IPRO Project, the knowledge of technical side and as well as the knowledge of the Business side is required simultaneously, we divided the whole group in mainly two groups:

1. Technical Group
2. Commercial Group

The technical group is working on the creation of the product under the guidance of Dr. Stine. Whereas Commercial group is preparing business plan and getting detailed knowledge of educational market to find out where we stand and how our competitive will be.

One of the team member is associated to build a website.

Summary of Progress:

Work done in-group meeting:

- Meeting with Dr. James stine. He explained the kinds of IC chips need for a robot, sensors & transducers, optical sensors, motors and the availability of the microprocessors.
- By meeting of Technical group to the Dr. stine, technical group got the tutorial for software ORCAD which will be useful for designing and also agreed to use HC 6811 processor.
- The lay out for the website is ready. Time schedule for website is made. Work is started to make a website.
- Dr. stine said that Memory should be our key part in creating the robot. We need 256K memory. We need E2 ROM & the SRAM types of memory.
- Getting the detailed information about Legos and Handyboards.

Work has to be done:

- Designing the robot by using ORCAD software, Testing the circuit and packaging for the microprocessor.
- To take survey of high schools and colleges to get the knowledge about how wide our market will be and what modification we can made on out product to make it more popular
- Complete the website working.

Technical group:

- select the components for the board and design the robot by ORCAD software
- Contact the PCB manufactures and get the detail about it and send to the appropriate PCB manufacturer to assemble it.
- Testing the circuit
- Casing for the micro processor

Commercial Group:

- To take survey of High Schools and colleges to get the knowledge about how wide our market will be and what modification we can make on our product to make it more popular.
- To find out the reasonable prize for the product such that we can get good profit by selling it as well as customer satisfies.
- Get the picture of day-to-day operation
- Determination of our product cost

Timeline for the project:

Time line for the technical tasks:

Project Schedule

Technical Design Track Tasks	January				February				March				April				May																			
	<u>18</u>	<u>20</u>	<u>25</u>	<u>27</u>	<u>1</u>	<u>3</u>	<u>8</u>	<u>10</u>	<u>15</u>	<u>17</u>	<u>22</u>	<u>24</u>	<u>1</u>	<u>3</u>	<u>8</u>	<u>10</u>	<u>15</u>	<u>17</u>	<u>22</u>	<u>24</u>	<u>29</u>	<u>31</u>	<u>5</u>	<u>7</u>	<u>12</u>	<u>14</u>	<u>19</u>	<u>21</u>	<u>26</u>	<u>28</u>	<u>3</u>	<u>5</u>	<u>10</u>	<u>12</u>		
Investigate Industry Structure			x		x	x	x										x	x																		
Select compatible market segment							x	x	x	x							x	x																		
Locate addressable opportunity										x	x		x	x			x	x																		
Define product functionality													x	x	x	x	x	x	x	x																
Select components for board													x	x	x	x	x	x	x	x	x															
Contact PCB manufacturer																	x	x	x	x	x															
Develop Orcad file of the board																	x	x	x	x																
Decide on components for the robot body																					x	x	x	x												
Test Board																											x	x								
Design Casing																																				
Build and Program Demo Robots																																				

Time line for the Commercial tasks:

Project Schedule

Commercial Track Tasks	January				February				March				April				May																			
	<u>18</u>	<u>20</u>	<u>25</u>	<u>27</u>	<u>1</u>	<u>3</u>	<u>8</u>	<u>10</u>	<u>15</u>	<u>17</u>	<u>22</u>	<u>24</u>	<u>1</u>	<u>3</u>	<u>8</u>	<u>10</u>	<u>15</u>	<u>17</u>	<u>22</u>	<u>24</u>	<u>29</u>	<u>31</u>	<u>5</u>	<u>7</u>	<u>12</u>	<u>14</u>	<u>19</u>	<u>21</u>	<u>26</u>	<u>28</u>	<u>3</u>	<u>5</u>	<u>10</u>	<u>12</u>		
Investigate Industry Structure			x		x	x	x										x	x																		
Select compatible market segment							x	x	x	x							x	x																		
Locate addressable opportunity										x	x		x	x			x	x																		
Perform Competitive Analysis																	x	x	x	x	x	x														
Define product functionality													x	x	x	x	x	x	x																	
Develop the value proposition																	x	x	x	x																
Identify targeted customers																	x	x	x	x	x	x														
Develop/complete a market survey																																				
Establish market size, potential																																				
Establish pricing structure																																				
Define marketing/promotion strategy																																				
Select sales/distribution channels																																				
Picture of day-to-day operations																																				

Determination of costs
 Risks, consequences, mitigation

x x
 x x
 x x
 x x
 x x
 x x
 x x
 x x

x x x
 x x x x

Time line for the website development:

IPRO 353 Robotics Business Plan																													
Project Schedule for Website																													
Tasks	February							March							April							May							
	1	3	8	10	15	17	22	24	1	3	8	10	15	17	22	24	29	31	5	7	12	14	19	21	26	28	3	5	10
Build Structure													x	x															
- Check Evaluation Form													x	x															
- Review Winning Website													x	x															
- Determine Menu Components													x	x															
													x	x															
													x	x															
Get Contents													x	x															
- Take Pictures & Video													x	x															
- Collect Documents													x	x															
													x	x															
													x	x															
Generate Website													x	x															
- Make Basic Templet													x	x															
- Make Menu Prototype & Sub-Menu													x	x															
- Allocate Contents													x	x															
- Make Image for Menu & Contents													x	x															
- Change Menu Prototype to Flash													x	x															
													x	x															
													x	x															
Final Website Test (Based on Evaluation Form)													x	x															
- Check Navigation & Link													x	x															
- Check Contents													x	x															
- Check Loading Time													x	x															
- Check Browser Compatability													x	x															
													x	x															
													x	x															
													x	x															
													x	x															
													x	x															
Debug Problems (Based on Final Test Result)													x	x															

Dead Line for

Obstacles:

In the beginning of the project, the main problem we had to face was to define the goal. It took very long for us to decide the goal. We had to find the current industry structure and how will it go in future to find out the stability of our future product in the market. As all of us were new in business side it took a while to understand it. So our starting was a bit slow.