

Last Updated: 2/15/2013

Targets	Estimated Date	% Complete	Completed Date	Person Responsible	# of Hours to Complete	Comments
Planning						
Initial customer needs/problem definition	12/10/2012	100%	12/7/2012	Andrew	2	
Identify stakeholders	12/2/2012	100%	11/30/2012	Andrew	1	Performed by everyone; final check by Andrew
Team setup	11/30/2012	100%	11/30/2012	John	0.25	
Review PRP and Initial Research	12/1/2012	100%	12/1/2012	Andrew	4	Performed by everyone; final check by Andrew
1 page summary	12/12/2012	100%	12/6/2012	Tim	1	
Benchmarking	12/12/2012	100%	12/11/2012	Andrew	2	
Initial specifications	12/5/2012	100%	12/5/2012	Andrew	1	
Interview stakeholders	12/11/2012	100%	12/13/2012	John	4.5	Scheduled interviews w/ Mr. Hanzlik and Mr. Wellin on 12/5, 12/11, 12/13. Task shared by everyone.
Team assessment rubric	12/5/2012	100%	12/3/2012	John	2	
Target quality metrics definition	12/5/2012	100%	12/4/2012	John	5	Performed by everyone; final check by John
Initial project plan	12/14/2012	100%	12/7/2012	John	2	
Update EDGE with planning	12/14/2012	100%	12/12/2012	John	4	
Systems Design Review (SDR)						
Finalize customer needs	12/11/2012	100%	12/13/2012	Andrew	2	Delayed due to interview scheduled for 12/13 with customer. Shared by Andrew and John.
Functional decomposition	12/10/2012	100%	12/7/2012	Andrew	2	
Brainstorm for concept generation	12/7/2012	100%	12/5/2012	John	2	Performed by everyone; Final check by John
Concept options/models	12/7/2012	100%	12/7/2012	John	2	Performed by everyone; Final check by John
Concept selections	12/12/2012	100%	12/12/2012	John	9.5	Discussed in meeting on 12/9; to be finished after 12/11 meeting
-Flow visualization	12/12/2012	100%	12/9/2012	Dan	0.5	Electrolysis and beads
-Flow speed control	12/12/2012	100%	12/9/2012	Dan	0.5	Valve control
-Holding fixture	12/12/2012	100%	12/9/2012	John	0.5	Magnets
-Angle of attack fixture	12/12/2012	100%	12/12/2012	John	2	Magnets
-Fluid	12/12/2012	100%	12/9/2012	John	0.5	Water
-Water movement	12/12/2012	100%	12/9/2012	Andrew	0.5	Water pump
-Water reservoir	12/12/2012	100%	12/9/2012	Andrew	0.5	Drum on a cart interfaced
-Flow meter	12/12/2012	100%	12/9/2012	Andrew	0.5	High speed camera
-Input water	12/12/2012	100%	12/9/2012	Andrew	0.5	Garden hose to reservoir
-Cart structure	12/12/2012	100%	12/9/2012	Andrew	0.5	Commercial cart
-Expelling water	12/12/2012	100%	12/9/2012	Tim	0.5	Pump and valve system
-Flow straighteners	12/12/2012	100%	12/9/2012	Tim	0.5	Plate w/ holes > tube type
-Geometry of water table reservoir	12/12/2012	100%	12/12/2012	Tim	1	Nozzle geometry (contracting section)
-Tank material	12/12/2012	100%	12/9/2012	John	1	HDPE
Final specifications/HOQ	12/12/2012	100%	12/13/2012	John	4.5	Delayed due to interview scheduled for 12/13 w/ customer; task shared by Andrew and John.
Feasibility analysis	12/15/2012	100%	12/15/2012	John	12	Discussed next steps in meeting on 12/9; Final check by John
-Electrolysis	12/15/2012	100%	12/15/2012	Dan	5	To be analyzed on 12/15-12/16 (mini-experiments)
-Bubble rise for electrolysis	12/15/2012	100%	12/14/2012	Tim	2	
-Uniform flow speed analysis	12/15/2012	100%	12/11/2012	Tim	1.5	CFD Analysis
-Viscous effects analysis	12/15/2012	100%	12/8/2012	Andrew	0.5	
-Test specimen holding	12/15/2012	100%	12/15/2012	Andrew	1	
-Flow analysis	12/15/2012	100%	12/15/2012	Tim	1	
-Pump power required	12/15/2012	100%	12/13/2012	Andrew	1	
System model	12/15/2012	100%	12/13/2012	John	3	
Timing diags.	12/16/2012	100%	12/14/2012	Dan	1.5	
Risk assessment	12/15/2012	100%	12/14/2012	Dan	2	Performed by everyone; final check by Dan
Preliminary Budget	12/16/2012	100%	12/15/2012	Andrew	4	
SDR Presentation Slides	12/17/2012	100%	1/6/2013	John	3	Delayed due to waiting for Tim to add final selections slide
Update EDGE with SDR Information	12/22/2012	100%	1/9/2013	John	5	Delayed due to waiting for Tim to add calculations
Update project plan through SDR	12/22/2012	100%	12/21/2012	John	4	
Detailed Design Review (DDR)						
HW/SW design	1/30/2013	100%	1/30/2013	John	26.5	Includes feasibility analysis and experimentation
-Water Table Construction	1/16/2013	100%	1/11/2013	John	2	Curbell Plastics- Contacted representatives (acrylic sheets and adhesive)
-Table to Hold Water Table	1/16/2013	100%	1/11/2013	John	1	
-Test Fixture Holder	1/16/2013	100%	1/16/2013	Andrew	2	
-Piping	1/18/2013	100%	1/18/2013	Andrew	3	
-Pump	1/18/2013	100%	1/16/2013	Andrew	5	New pump w/ larger hp needed than that provided by Mr. Wellin
-Drum reservoir	1/21/2013	100%	1/18/2013	Andrew	1	Changed to a rectangular tank for drain purposes
-Control Flow	1/21/2013	100%	1/17/2013	Andrew	1.5	Butterfly
-Electrolysis	1/30/2013	100%	1/30/2013	Dan	6	
-Tank Geometry	1/22/2013	100%	1/22/2013	Andrew	3	Decided that CFD analysis was not necessary due to variable geometry
-Cart Design	1/18/2013	100%	1/18/2013	John	2	
Develop CAD model	1/20/2013	100%	1/25/2013	John	26.5	Final check by John; A lot of components changed upon customer review --> reason for delay
-Tank	1/16/2013	100%	1/16/2013	Tim	3.5	Shared by Tim and John
-Piping	1/20/2013	100%	1/23/2013	Tim	11	Shared by Tim and John;
-Reservoir/Cart	1/16/2013	100%	1/23/2013	Tim	2.5	
-Total Assembly	1/20/2013	100%	1/23/2013	Tim	8	
-Create pictures for EDGE	1/20/2013	100%	1/25/2013	Tim	1.5	Putting assembly and major component drawing in pdf on EDGE
Week 7 Meeting w/ Customers	1/23/2013	100%	1/23/2013	John	1.5	Meeting to discuss progress on feasibility analysis w/ customers
Update Quality Metrics	1/23/2013	100%	1/23/2013	Dan	2.5	
Develop CAD drawings	2/1/2013	100%	1/30/2013	John	4	
-Tank	2/1/2013	100%	1/30/2013	Tim	1	
-Pipes	2/1/2013	100%	1/30/2013	Tim	0.5	
-Cart (for water reservoir)	2/1/2013	100%	1/30/2013	Tim	1	
-Test Specimens	2/1/2013	100%	1/30/2013	Tim	1.5	
Identify "off-the-shelf" parts needed	1/26/2013	100%	1/23/2013	Andrew	6	Shared by Dan and Andrew; final check by Andrew
Assy. process	2/2/2013	100%	2/1/2013	John	13	Shared by Andrew, Dan, and John; Final check by John
-Tank	1/25/2013	100%	1/25/2013	John	5	
-Pipes	2/2/2013	100%	1/30/2013	Andrew	4	All done except waiting on feedback from team about flowmeters 27 Jan
-Test Specimens	2/2/2013	100%	1/29/2013	Andrew	2	
-Cart (for water reservoir)	1/30/2013	100%	2/1/2013	Dan	2	
Tank Breakdown Procedure	2/15/2013	100%	2/14/2013	Dan	2.5	
Test plan	2/2/2013	100%	2/1/2013	Dan	4	Shared by Andrew, Dan, and John; Final check by Dan
BOM	2/3/2013	100%	2/1/2013	Andrew	15	
Budget, POs	2/15/2013	100%	2/13/2013	Andrew		Shared by everyone; final check by Andrew
Risk Management Update	2/5/2013	100%	2/1/2013	Dan	2.5	Shared by Dan and John; final check by Dan
DDR Presentation	2/8/2013	100%	2/8/2013	John	7	Shared by John and Dan; Final check by John
Update EDGE with DDR Information	2/15/2013	100%	2/14/2013	John	6	Final check by John; Need to action items list from DDR
Update project plan through DDR	2/15/2013	100%	2/14/2013	John	2	

MSD 1

MSD II	Preparation for MSD II						
	Review EDGE for Errors	2/15/2013	100%	2/10/2013	Dan	1.5	
	Update MSD I Project Plan	2/15/2013	100%	2/10/2013	John	1	
	Prep for MSD II / Project Plan	2/15/2013	100%	2/10/2013	John	1.5	
	Team Evaluations						
	Week 3 Team Evaluation	12/15/2013	100%	12/15/2013	John	0.5	
	Week 7 Team Evaluation	1/23/2013	100%	1/23/2013	John	0.5	
	Week 10 Team Evaluation	2/15/2013	100%	2/12/2013	John	0.5	
	Staging						
	SW coding/test	N/A	N/A	N/A	N/A	N/A	N/A
	Component inspection	3/15/2013	0%		Andrew		
	-Water Table Tank for Leaks	3/5/2013	0%		John		
	-Wood for Cart	3/6/2013	0%		Tim		
	-Electrical Components	3/6/2013	0%		Dan		Electrolysis components and circuit, power box, circuit enclosures, e-stops
	-Piping for Damage or Leaks	3/11/2013	0%		Andrew		
	-Misc. Parts	3/15/2013	0%		Tim		
	Full Functioning Demo						
	System assy.	3/21/2013	0%		John		
	-Water Table Tank	3/11/2013	0%		John		
	-Nozzle Panels	3/6/2013	0%		John		
	-Honeycomb Flow Straighteners	3/8/2013	0%		John		
	-Baffle	3/11/2013	0%		John		
	-Cart Assembly	3/13/2013	0%		Tim		
	-Electrical Components	3/16/2013	0%		Dan		Electrolysis components and circuit, power box, circuit enclosures, e-stops
	-Piping	3/21/2013	0%		Andrew		
	-Test Specimens	3/21/2013	0%		Andrew		
	-System Full Assembly	3/21/2013	0%		Andrew		
	Full exercise	3/22/2013	0%		John		
	Week 3 Demonstration	3/22/2013	0%		John		
	Week 6 Demonstration	4/12/2013	0%		John		
	Problem management / debug	4/19/2013	0%		Andrew		
	Quality assessment	4/19/2013	0%		Dan		
	Week 9 Final Demonstration	5/3/2013	0%		John		
	Testing						
	Exec. test plan	4/1/2013	0%		Andrew		
	Data collection	4/26/2013	0%		John		
	System modeling/data	4/26/2013	0%		Tim		
	Reconciliation	4/29/2013	0%		Dan		
	Reporting						
	Final paper	5/1/2013	0%		Dan		
	Imagine demo	5/4/2013	0%		Andrew		
	Poster	5/3/2013	0%		Tim		
	Lesson learned	5/10/2013	0%		John		
	Final presentation	5/10/2013	0%		John		
	Team Evaluations						
	Week 13 Team Evaluation	12/15/2013	0%		John		
	Week 16 Team Evaluation	1/23/2013	0%		John		
	Week 19 Team Evaluation	2/15/2013	0%		John		