Engin 103	Topics:
March 8, 2011	Project 1 -Part II Presentations
	Logbook questions
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Project 1 Part II Presentations: Data Modeling and System Predictability Testing

Excerpt from Project 1 specifications (see link in e-syllabus): "In the second day, you will show the class the predictability of your system. The predictability will be checked as follows: you will be required to show a sufficient (at least 10) number of data (X,Y)'s you measured using your system, and the best model or equation Y'=f(X) you found with Excel in relating these data. Next you will be required to use this model to make a prediction Y' for some new value X, given by the audience, with your model. Next you will run your system for that input X, obtaining the actual output Y. Your system will be considered predictable if Y' and Y differ by less than 10%."

Project 1 leaders: please copy this document and fill in your team response below. Then save as a web page: name "p1p2.html" and upload to your *files* folder.

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Section 1 (9:30 AM)

Team #	Snapshot of Spreadsheet showing best mathematical model for your system	 a) Your best model" A=; B=; C=; D= b) What are the requested X= and predicted output Y'= along with their units 	 c) List the three values obtained Y₁=; Y₂=; Y₃=; d) List their average Y_{av} e) Y'-Y_{av} /Y_{av} *100= % 	 f) Explain your thoughts on what design elements most influenced the predictability obtained g) Explain what can be done to further improve its predictability
1 section 1				
<u>2</u> section 1				
<u>3</u> section 1		a)	b)	c)
<u>4</u> section 1			a)	b)
<u>5</u> section 1				
6 section 1				
<u>7</u> section		a)	b)	
8 section 1				
9 section 1				
<u>10</u> section				

Team # Sr sh mo	apshot of Spread owing best math odel for your sys	dsheet h) Your I iematical A=; B tem i) What reque predic along units	est model" :; C=; D= ire the sted X= and ted output Y'= with their	j) k) I)	List the three values obtained $Y_{1=}$; $Y_{2=}$; $Y_{3=}$; List their average Y_{av} $ Y'-Y_{av} /Y_{av} *100= \%$	m) n)	Explain your thoughts on what design elements most influenced the predictability obtained Explain what can be done to further improve its predictability
1 section 2							
2 section 2							
<u>3</u> section 2							
4 section 2							
<u>5</u> section 2		i.)					
<u>6</u> section 2							
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<u>8</u> section 2							
<u>9</u> section 2							
<u>10</u> section 2							
Report for to	eam #						
Submitted			On time		Late		
Uploaded el	ectronic cop	у	Yes		No		
Project 1 we	Project 1 web page Team participation table				No		
Team partic					No		
		Progress Report:					
Report subn	nitted (80)	p1pr.html (5)					
		p1p1.html (5)					
		p1p2.html (5)					
		Introduction (10)					

_	D · /D		(25)								
	Design/Bu	llding	g (25)					-			
	Analysis: S	Sprea	dsheets								
	(20)										
	Conclusion	ns (10))								
Good writing practices	Grammar a	ind									
(20)	presentatio	n (5)									
	Logical arg	gume	nts and								
	structures (5)									
	Accurate,										
	completene	ess; n	on-								
	plagiarism	(10)									
Deduction		~ /						-			
Project report total (100)							-			
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5 1				Web page	es Parts I a	and II (20)	:	-			
Project 1 total (300)				10							
Section 1											
Project 1 -part I P&D/ Te	ams	1	2	3	4	5	6	7	8	9	10
Project completed (35)											
Design for predictability (1)	5)										
Performance& readiness (2.	5)										
Presentation (15)											
Total part I P&D (90)											
	I										

Section 2										
Project 1 -part I P&D/ Teams	1	2	3	4	5	6	7	8	9	10
Project completed (35)										
Design for predictability (15)										
Performance& readiness (25)										
Presentation (15)										
Total part I P&D (90)										
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LOGBOOK: <u>example of a logb</u>	ook page									
Lize a supdrille notabacht sur		ana data	all antria	~						
-Use a quaurine notes for all acti	iber all pa	iges; date	all entrie	s nd soluti	one and	loorning	conclusio	ns rolato	d to Engi	n 103 Vou
should write down progress	utcomes	and cond	oblems a	n project	ts and tea	mwork	conclusio	ns from a	u to Engl class worl	in 105. 10u (including
LabVIEW) and homework.	utcomes,	unu conc		n project	is and tet		conclusio			(including
-In addition you should answer	in the log	book all	questions	listed in	these note	s in blue,	as shown	below:		
·	U		•							
27) Insert the spreadsheet ma	de by you	r team fo	r the syst	em prese	nted. Ma	ke a table	e of the co	oefficients	and para	meter s for
the different models considered	l by the te	eam, simil	ar to that	t submitte	ed in CW	4. Explair	ı which n	nodel was	chosen to	be the best
and why.										
28) For each of the other teams,	list their pr	edictabilit	ty results (in percent	age error	between p	rediction a	nd averag	e measure	ment done in
back	iese results	with theil	r system de	esigns, das	seu on you	r own poin	is of view.			
Uder										