

Engin 103
May 8, 2008

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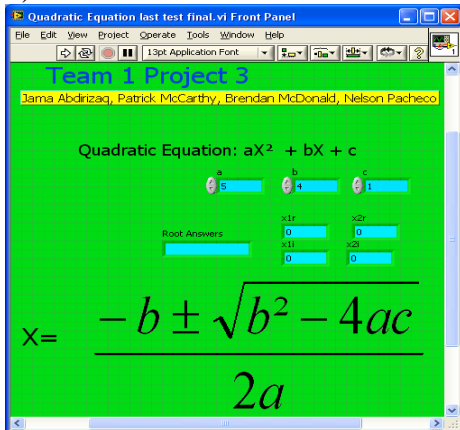
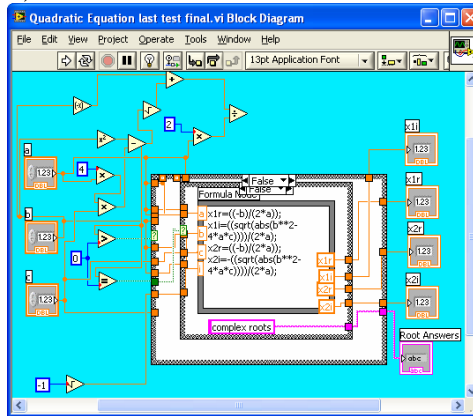
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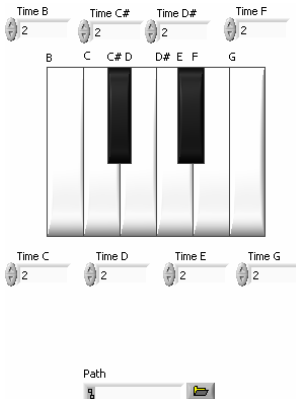

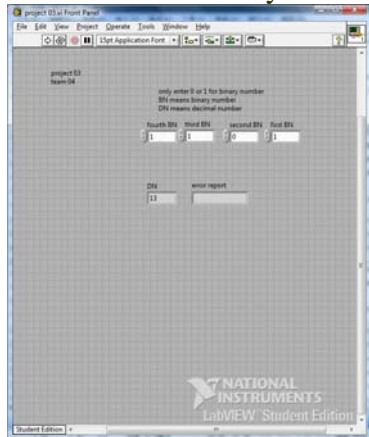
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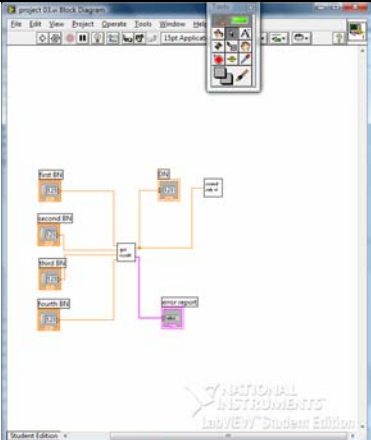
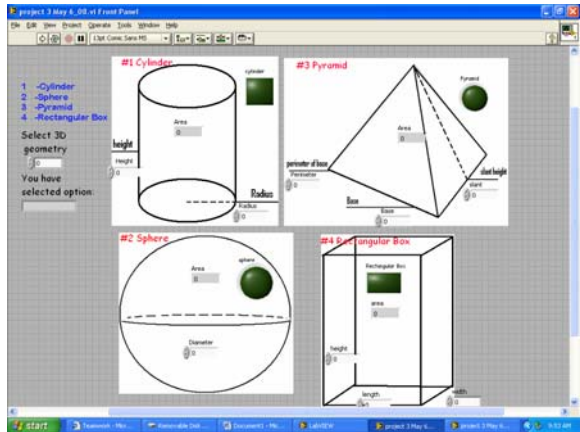
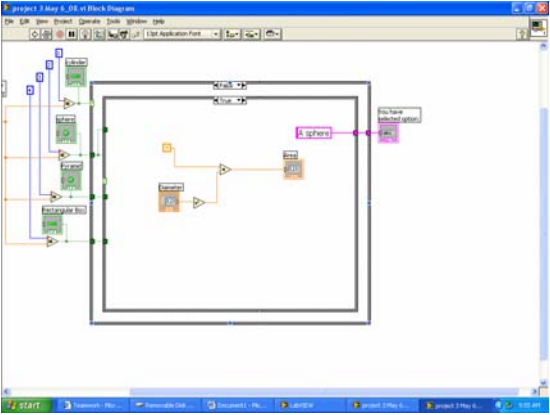
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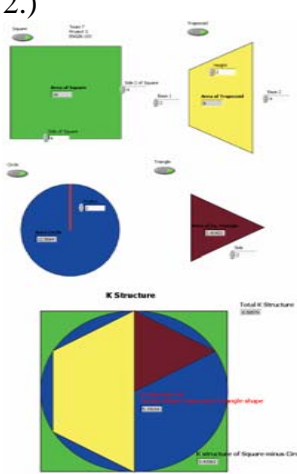
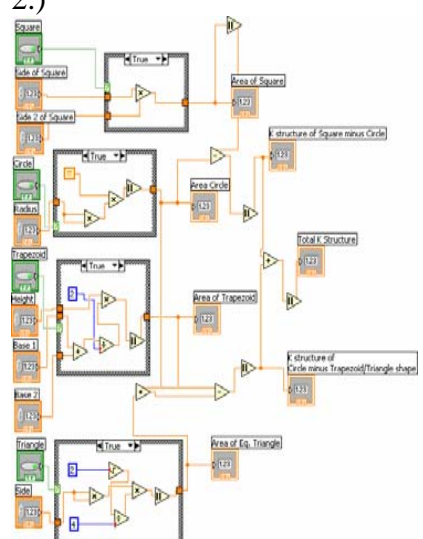
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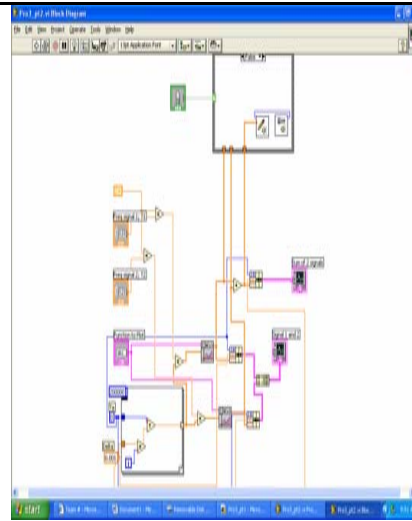
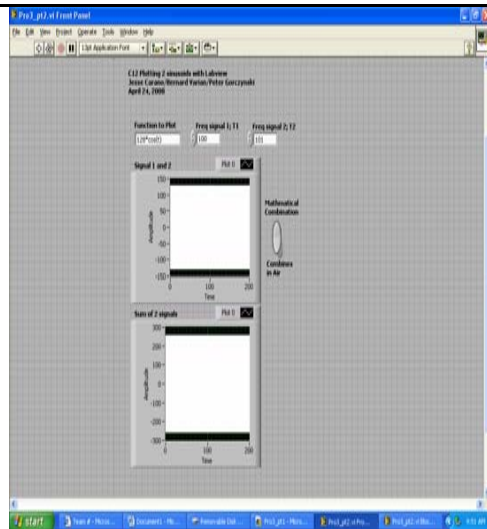
Project 3 Part II Presentations

Team #	1) Describe the project you are presenting 2) Insert a snapshot of your final Front Panel, resize to 2in. tall	1) List the LabVIEW elements you are using in the Block Diagram 2) Insert a snapshot of the finalized Block Diagram here, resize to 2in. tall	Explain the modifications your team did for Part II of the presentations
1	<p>) We built a virtual instrument to solve the Quadratic Equation and used a string indicator to display the types of roots that made the solution.</p> <p>2)</p> 	<p>1) Formula node, Arithmetic operations, string constant, string indicator.</p> <p>2)</p> 	<p>For part two we added a string indicator to show the types of roots our VI was getting for a solution.</p>
2			
3	<p>1) Project E – the key piano. Using the Virtual Instrument to produce and</p>	<p>1)Used path indicators, numeric indicators, command boxes, numeric</p>	<p>For part II, Team 3 attempted to prolong the sound files</p>

	<p>simulate a different frequencies/sounds from piano keys.</p> <p>2)</p> 	<p>controls, frequency indicators, time indicators, and cycles.</p> <p>2)</p> 	<p>longer. Due to complications within the Virtual Instrument program, this was never done.</p>	
4	<p>Say the decimal number for a four-digit binary number</p> 	<p>Numeric control, numeric indicator, string indicator, case structure Boolean operator(or, and, equal?) and open sound file.</p>	<p>In part two we put a string indicator to show the input error. We also create a new sub VI that can check the input is right or wrong and produce a error report and result.</p>	

				
5	<p>Finding the total area of four basic geometric shapes in three dimensional form</p> 	<p>Numeric controls, Numeric indicators, numeric constants, Boolean LED's, case structures</p> 	<p>We added the Boolean LED's to the satisfied path on each geometric shape to highlight the appropriate shape</p>	
6	<p>1) Predict the average price of gas for the following week using the previous weeks gas prices 2)</p>	<p>1) LabVIEW elements used: Case Structure, XY Graph, Exponential Fit VI, Power of X function, Numeric Controls and Indicators, Boolean Radio</p>	<p>For part II we added numeric indicators for the amplitude and damping outputs of the exponential fit and additional</p>	

		Button 2)	weeks proceeding the week the VI is predicting the price of gas
<u>7</u>	<p>1.) Presenting the areas of 4 2D shapes where we can switch off or on each case structure to get any variable as our k structure (outputs)</p> <p>2.)</p> 	<p>1.) Case structures, K structures, Boolean switches, absolute values, and equations for the area of 4 2D shapes</p> <p>2.)</p> 	<p>1.) Our team included 3 absolute values to our K structures to get positive numbers, plus we excluded our measurements inside the diagram for numeric controls</p>
<u>8</u>			
<u>10</u>	1) Combining two frequencies to make one sound.	2) Function, Sound output, sound config, and Bundle	We put the sound outputs into case structures.



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Project 3 Grades

Project 3 -part I/ Teams	1	2	3	4	5	6	7	8	10
Project completed (30)	30	30	30	30	30	30	30	30	30
Design (LabVIEW elements) (20)	18	15	20	20	16	18	16	18	16
Performance (project assigned)(25)	24	24	25	25	24	24	24	22	25
Presentation (12.5) and web page (12.5)	13	25	13	25	13	15	25	13	13
Total part I (100)	85	94	88	100	83	87	95	83	84
Project 3 -part II/ Teams	1	2	3	4	5	6	7	8	1

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Project completed (30)	30	30	30	30	30	30	30	30	30
Design (LabVIEW elements) (20)	18	15	20	20	18	18	18	18	18
Performance (modifications assigned)(25)	25	15	25	25	25	25	24	24	25
Presentation (12.5) and web page (12.5)	13	25	13	25	13	15	25	13	13
Total part II(100)	86	85	88	100	86	88	97	85	86
Total Project 2 Pres. (200)	171	179	176	200	169	175	192	168	170

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LOGBOOK: example of a logbook page

- Use a quadrille notebook; number all pages; date all entries
- Write your notes for all activities, thoughts, problems and solutions, and learning conclusions related to Engin 103. You should write down progress, outcomes, and conclusions on projects and teamwork; conclusions from class work (including LabVIEW) and homework.
- In addition you should answer in the logbook all questions listed in these notes in blue, as shown below:

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