| Engin 103          | Topics:                        |
|--------------------|--------------------------------|
| November 8, 2011   | Project 2 Part I Presentations |
|                    | Logbook questions              |
| back to e-syllabus |                                |

## **Project 2 Part I Presentations**

Project 2 leaders: please copy this document and fill in your team response below. Then save as a web page: name "p2p1.html" and upload to your *files* folder, don't forget to upload the associated folder "p2p1\_files" for the pictures to show. This upload **is required** as part of <u>Project 2</u> on LabVIEW Virtual Instruments. It is due on the day of the presentation for Project 2 Part I (see e-syllabus)

## Section 1 (9:30 AM)

| Team #             | Brief descriptions of the<br>problem your VI is solving. What<br>are the inputs and outputs,<br>units, range of values, etc. | Insert a snap shot of the Front Panel.<br>Resize the figure to a height of 2in | Insert a snap shot of the Block<br>Diagram. Resize the figure to a height<br>of 2in | Grade your team readiness<br>for Part II: (1- still figuring<br>what to do; 2- have the<br>equations but not the VI; 3-<br>have the VI and sub-VI with<br>some errors; 4- VI and sub<br>VI tested, ready to go)*<br>Note: Office hours are M<br>(12-4pm) and W(9am-1pm) |
|--------------------|--|--|---|---|
| 2 section 1        | -  |  |   |   |
| <b>2</b> section 1 |  |  |   |   |
| <b>3</b> section 1 |  |  |   |   |
| <b>4</b> section 1 |  |  |   |   |
| 5 section 1        |  |  |   |   |
| <b>6</b> section 1 |  |  |   |   |
| <b>7</b> section 1 |  |  |   |   |
| <b>S</b> section 1 |  |  |   |   |
| 9 section 1        |  |  |   |   |

| Feam #                   | Brief descriptions of the problem your VI<br>is solving. What are the inputs and<br>outputs, units, range of values, etc. | Insert a snap shot of the Front Panel.<br>Resize the figure to a height of 2in | Insert a snap shot of the Block Diagram.<br>Resize the figure to a height of 2in | Grade your team<br>readiness for Part<br>II: (1- still figuring<br>what to do; 2- have<br>the equations but<br>not the VI; 3- have<br>the VI and sub-VI<br>with some errors;<br>4- VI and sub-VI<br>tested, ready to<br>go)*<br>Note: Office hours<br>are M (12-4pm) and<br>W(9am-1pm) |  |
|--------------------------|---|--|--|--|--|
| section 2                |   |  |  |  |  |
| Section 2                |   |  |  |  |  |
| <b>3</b> section 2       |   |  |  |  |  |
| section 2                |   |  |  |  |  |
| 5 section 2              |   |  |  |  |  |
| 5 section 2              |   |  |  |  |  |
| <pre>2 section 2</pre>   |   |  |  |  |  |
| <mark>8</mark> section 2 |   |  |  |  |  |
| 🦻 section 2              |   |  |  |  |  |
| 10 section 2             |   |  |  |  |  |

## Section 1

| Project 2 -part I P&D/ Teams  | 1               | 2                            | 3             | 4            | 5                      | 6           | 7  | 8     | 9         | 10    |
|-------------------------------|-----------------|------------------------------|---------------|--------------|------------------------|-------------|--|-------|-----------|-------|
|                               | Vehicle<br>Loan | Capacitor<br>Combinati<br>on | Race<br>Track | Ball<br>Ramp | Salary<br>and<br>Taxes | Car<br>Ramp | Ball<br>Ramp<br>and<br>Motion at<br>Different<br>Times |       | Parachute |       |
| Design -FP Ergonomic (10)     | 8               | 10                           | 10            | 10           | 10                     | 9           | 10   |       | 10        |       |
| Design -FP Correct Info (10)  | 10              | 10                           | 10            | 10           | 10                     | 10          | 10   |       | 8         |       |
| Design -BD Organ./Wiring (10) | 9               | 9                            | 8             | 10           | 9                      | 9           | 9  |       | 10        |       |
| Design -BD Transparency (10)  | 9               | 10                           | 8             | 10           | 9                      | 9           | 9  |       | 10        |       |
| Requirements satisfied (10)   | 10              | 10                           | 10            | 10           | 8                      | 10          | 10   |       | 9         |       |
| Design Total (50)             | 46              | 49                           | 46            | 50           | 46                     | 47          | 48   | 0     | 47        | 0     |
| Performance -Proficiency (20) | 18              | 18                           | 19            | 20           | 18                     | 18          | 18   |       | 18        |       |
| Performance -Pract. App. (10) | 10              | 9                            | 10            | 10           | 10                     | 10          | 9  |       | 10        |       |
| Performance -Complexity (10)  | 9               | 9                            | 9             | 10           | 8                      | 8           | 9  |       | 8         |       |
| Performance Total (40)        | 37              | 36                           | 38            | 40           | 36                     | 36          | 36   | 0     | 36        | 0     |
| Presentation (15)             | 15              | 15                           | 15            | 15           | 15                     | 15          | 15   | 15    | 15        | 15    |
| Raw total (105)               | 98              | 100                          | 99            | 105          | 97                     | 98          | 99   | 15    | 98        | 15    |
| Total part I P&D (90)         | 84.00           | 85.71                        | 84.86         | 90.00        | 83.14                  | 84.00       | 84.86  | 12.86 | 84.00     | 12.86 |
| Project 2 -part I P&D/ Teams  | 1               | 2                            | 3             | 4            | 5                      | 6           | 7  | 8     | 9         | 10    |

|                               | Vehicle<br>Loan        | Capacitor<br>Combinati<br>on | Race<br>Track | Ball<br>Ramp        | Salary<br>and<br>Taxes | Car<br>Ramp     | Ball<br>Ramp<br>and<br>Motion at<br>Different<br>Times |                        | Parachute                                      |      |
|-------------------------------|------------------------|------------------------------|---------------|---------------------|------------------------|-----------------|--|------------------------|--|------|
| Section 2                     |                        |                              |               |                     | -                      |                 |  |                        |  |      |
| Project 2 -part I P&D/ Teams  | 1                      | 2                            | 3             | 4                   | 5                      | 6               | 7  | 8                      | 9  | 10   |
| Nov. 9, 2010                  | Box<br>Down<br>Incline | Kinematic<br>Equations       | Wing Lift     | Potential<br>Energy | Car Down<br>Ramp       | Burger<br>Joint | Tracking<br>Passenge<br>rs from<br>NY                  | Mortgage<br>Calculator | Transportati<br>on with<br>Multiple<br>Drivers |      |
|                               |                        |                              |               |                     |                        |                 |  |                        |  |      |
| Design -FP Ergonomic (10)     | 10                     | 10                           | 10            | 10                  | 10                     | 10              | 10   | 10                     | 10   |      |
| Design -FP Correct Info (10)  | 10                     | 10                           | 10            | 9                   | 9                      | 10              | 10   | 10                     | 10   |      |
| Design -BD Organ./Wiring (10) | 10                     | 10                           | 10            | 10                  | 10                     | 10              | 10   | 10                     | 10   |      |
| Design -BD Transparency (10)  | 10                     | 10                           | 10            | 10                  | 10                     | 10              | 10   | 10                     | 10   |      |
| Requirements satisfied (10)   | 10                     | 10                           | 10            | 10                  | 10                     | 10              | 10   | 10                     | 10   |      |
| Design Total (50)             | 50                     | 50                           | 50            | 49                  | 49                     | 50              | 50   | 50                     | 50   | 0    |
| Performance -Proficiency (20) | 20                     | 18                           | 20            | 20                  | 18                     | 18              | 18   | 18                     | 18   |      |
| Performance -Pract. App. (10) | 10                     | 10                           | 10            | 10                  | 10                     | 10              | 10   | 10                     | 18   |      |
| Performance -Complexity (10)  | 9                      | 8                            | 9             | 10                  | 9                      | 8               | 7  | 10                     | 7  |      |
| Performance Total (40)        | 39                     | 36                           | 39            | 40                  | 37                     | 36              | 35   | 38                     | 43   | 0    |
| Presentation (15)             | 15                     | 15                           | 15            | 15                  | 15                     | 15              | 15   | 15                     | 15   |      |
| Raw total (105)               | 104                    | 101                          | 104           | 104                 | 101                    | 101             | 100  | 103                    | 108  | 0    |
| Total part I P&D (90)         | 89.14                  | 86.57                        | 89.14         | 89.14               | 86.57                  | 86.57           | 85.71  | 88.29                  | 92.57  | 0.00 |
| Project 2 -part I P&D/ Teams  | 1                      | 2                            | 3             | 4                   | 5                      | 6               | 7  | 8                      | 9  | 10   |

## <u>back</u>

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:

37) Describe at least two LabVIEW elements not included in your team's VI but used in other teams' VI's.

38) Specify the inputs and outputs, with clear details including equations to obtain the outputs from the inputs, for your team Virtual Instrument to be presented as Part II of Project 2. List what LabVIEW elements will be used in the Block Diagram, how many times a subVI will be called in, and what elements will be included in the sub-VI, use LabVIEW terminology.

back