Advanced Embedded Systems Lab Demonstration Validation Sheet

This sheet should be modified by the student to reflect the current lab assignment being demonstrated

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| --- | --- |
| Lab Number: | Lab 5 – LCD and Accelerometer |
| Team Members | |  | | --- | | Team Member 1: emailID: | | Team Member 2: emailID: | |
| Date: |  |

# Lab Requirements

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| REQ Number | Objective | Self-Review | TA  Review |
|  | A “ball” moves around the LCD screen depending on the tilt of the board. |  |  |
|  | The movement of the ball is smooth and does not change more than one pixel every 50 milliseconds. |  |  |
|  | When the system starts and is sitting flat on the table, the “ball” is in the center of the screen. |  |  |
|  | When the system is oriented such that the board surface is at a 10 degree angle (or more) in the Y-axis while the X-axis is horizontal, the “ball” will “roll away” from the center of the screen towards to lower side of the screen. |  |  |
|  | When the system is oriented such that the board surface is at a 10 degree angle (or more) in the X-axis while the Y-axis is horizontal, the “ball” will “roll away” from the center of the screen towards to lower side of the screen. |  |  |
|  | The ball location shall work similarly as specified above in the X and Y dimension if both the X- and Y-sides of the screen are tilted 10-degrees (or more). |  |  |
|  | When the system is made flat after it has been tilted, the ball will stop moving and remain in position |  |  |