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English 21007

### Lab Report Analysis Assignment

In this analysis, it will be critiquing two lab reports given. One is called the “Evaluation of Vibration Analysis Tools to Predict the Dynamic Integrity of a Truss Structure,” which was done to discover the best method to find the natural frequency of a system and measure member stress. In this lab report, they showed how the group got to their conclusion on what is the best method to use by doing different experiments. They compared the methods by price, the time it takes to complete them and how accurate they are. The other lab report was called the, “Design of a Temperature Measurement and Display System Using the 68HC11 Microcontroller.” It was done to show how they can use the Motorola 68HC11 to measure the temperature and see when it goes above the prescribed limits set. The group talked on how they were going to design this and what was needed to make it and showed tests to show that they work. For the most part these two lab reports were understandable and laid out their instructions well enough that someone like me can follow it. But some of the things that could have been better was the introduction and the details that were not included inside the procedures, so that people like me can fully understand it.

The introduction in these two lab reports, were put well put together, but added information that could have been explained, after the introduction. An example of this is in lab report 2, which almost right away states the results they got from doing their experiment. In it, the author already states the best method used, that the group would later in the lab report would

state. They should have provided only what is needed to understand what the report would be about and state what it is trying to prove to the reader. Now for lab report 3, the flow of the second paragraph wasn't too good. It repeated certain words like "task of this objective," to express what the objectives would be. It doesn't even tell the reader what it is contributing to the field that it is talking about in the lab report.

When reading the procedures in both lab reports, they used some technical words that weren't fully defined nor detailed enough, to give the reader a clear meaning to them. An example of this can be seen in lab report 3, which doesn't state the meaning of the BAUD, SCCR1, and SCCR2 control registers are. It doesn't express what they are suppose to do in each step when doing them. In lab report 2, it actually doesn't do this and expresses each technical word, so you wouldn't get confused. This is shown with "G amp", it doesn't just say its a factor, but also what it isn't. In the setup it even showed an image with circles and numbers, to get a better understanding on where everything goes, so that anyone can do it correctly. But, in some statements made in the lab report, it doesn't fully detail there reasoning. This can be seen when talking about the setup of the HP signal analyzer equipment getting destroyed if not careful, it doesn't say what bad will happen. This just leaves the reader wondering why to be careful to not do what they say.

So, for the most part these two lab reports were well put together, but needed a bit of tweaking, so that new readers like me, can fully understand it without having to search for more details online. The flow in some parts could have also been better, including the amount of details put in the introduction, so readers won't be lost in the details that would be better understood when explained after the introduction.