**EE/CME 495 Project Management Update**

**Instructions**:

No matter how much time and effort is put into the initial planning process, a design project rarely goes exactly according to plan. As the design progresses and more information becomes available, it is necessary to track progress against the original plan and evaluate whether any modifications to the plan are required. This process will be discussed in more detail in class.

In EE/CME 495, groups are required to periodically complete the attached project management update form. A detailed listing of the due dates for these updates will be provided on the course website. The completed update forms should be emailed to your supervisor by the due date. They must also be uploaded to the appropriate shared folder on the course website. The completed update forms will be viewable by all class participants.

Provided you have been tracking your work in your logbooks, completing the attached form should not be an onerous process. In fact, completing these updates should actually save you time and stress in the future by pressuring you to make steady progress and focus on completing tasks in an efficient manner.

At the conclusion of each term, your supervisor will assign a grade to your group based on your project management performance.

**Explanation of entries in tables**

**Initial completion %**: The percentage of the task that was completed at the start of the time period under review.

**Planned completion %**: The percentage of the task that was expected to be completed at the end of the time period under review.

**Actual completion %**: An estimate of the actual percentage of the task that was completed at the end of the time period under review.

**Planned hours**: The number of hours that was expected to be spent on the task during the time period under review.

**Actual hours**: The actual number of hours that was spent on the task during the time period under review.

**EE/CME 495 Project Management Update**

Group Number + Project : Group 0, baseball pitch tracker

Group Members: Brian Berscheid, Eric Salt, Ha Nguyen

Dates Covered: September 29, 2018 – October 11, 2018

Part 1: Analysis of Task Progress

What work did the group plan to complete during the time period since the last update? What work was actually completed? Please complete the following table, listing each task that you either planned to work on or actually worked on during this time period.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Task** | **Initial Completion (%)** | **Planned Completion (%)** | **Actual Completion (%)** | **Planned Hours** | **Actual Hours** |
| 1.0 Develop performance requirements | 0% | 75% | 100% | 12 | 12 |
| 1.1 Review camera data sheet | 0% | 100% | 100% | 3 | 3 |
| 1.2 Interview customers | 0% | 100% | 100% | 3 | 3 |
| 1.3 Market research | 0% | 50% | 100% | 6 | 6 |
| 2.0 Prototype FPGA-camera interface | 0% | 100% | 50% | 12 | 15 |
| 3.0 Define user interface requirements | 0% | 100% | 50% | 12 | 6 |

Please also complete the following table, listing the planned and actual hours spent by each group member.

|  |  |  |  |
| --- | --- | --- | --- |
| **Group Member** | **Planned Hours** | **Actual Hours** | **Main Tasks** |
| Ha Nguyen | 12 | 12 | 1.1, 1.2, 1.3 |
| Brian Berscheid | 12 | 15 | 2.0 |
| Eric Salt | 12 | 6 | 3.0 |

If any significant deviations from the plan occurred, please explain why.

Ha Nguyen made better progress than expected during this time period, specifically in terms of task 1.3 (market research). By identifying a relevant competing product, he was able to make progress more quickly than expected and completed the entire market research task during this time period (the plan called for completion of only 50%).

Brian Berscheid was working on the prototyping of the FPGA-camera interface. This task proved more complex than expected, largely due to a lack of documentation about the camera configuration protocol. Despite putting in significant effort, Brian made less progress than expected.

Eric Salt also made less progress than expected on defining the user interface requirements. This was not due to any difficulties with the task itself. Rather, Eric was unable to spend the planned 12 hours working on the project, as he found it necessary to create an additional 50 assignment questions for EE 461. Eric intends to make up the time during subsequent reporting periods.

Part 2: Future Task Planning

What work do you plan to complete during the time period until the next scheduled update? Please list each task you plan to work on in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Initial Completion (%)** | **Planned Completion (%)** | **Planned Hours** |
| 2.0 Prototype FPGA-camera interface | 50% | 100% | 15 |
| 3.0 Define user interface requirements | 50% | 100% | 6 |
| 4.0 Define power supply requirements | 0% | 100% | 9 |
| 5.0 Write requirements specification document | 0% | 50% | 3 |
| 6.0 Investigate image processing algorithms | 0% | 50% | 6 |

Please also complete the following table, listing the planned hours for each group member for the upcoming period.

|  |  |  |
| --- | --- | --- |
| **Group Member** | **Planned Hours** | **Main Tasks** |
| Ha Nguyen | 12 | 2.0, 5.0, 6.0 |
| Brian Berscheid | 12 | 2.0 |
| Eric Salt | 15 | 3.0, 4.0 |

Part 3: Risk Mitigation

Identify any risks to the project or its schedule. Discuss the likelihood and potential impact of each risk identified, as well as mitigation strategies.

One major technical risk to the project is the interfacing of the camera to the FPGA. While unlikely, if the components are unable to be interfaced, the feasibility of the project could be called into question. More likely, the interfacing could be very challenging and time consuming. For this reason, we have started work on this task early on in the term. Since the task has proven more difficult than expected, Ha is going to help Brian with it prior to moving on to his other scheduled tasks.

A second large risk is that none of the team members is particularly familiar with image processing, which is a major component of the project. This means that our time estimates may be inaccurate and our technical solutions may be suboptimal, which could greatly impact the long term success of the project. To combat this risk, we are going to start investigating image processing algorithms during this time period. Ha Nguyen will meet with a professor in the CS department to ensure we are working in the right areas, then identify and review some relevant research papers.

Another potential source of risk is that each of the team members has other priorities on their plate, which may make it difficult to spend the desired amount of time on this project. If this situation persists, it could cause the project to be unsuccessful. The problem is currently most acute for Eric Salt, who has a particularly high teaching load at the moment. Eric is going to ask Rory Gowen to help out with the supervision of some lab exams in order to free up more time for him to work on this project.