Engineering Notebook Spring Semester 2024 Pt. 1

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1/11/2024: Semester Kickoff
Today marked our return from winter break. We met in the auditorium to discuss our goals and expectations for the semester with our professors. It was a good chance to review what worked well last semester and what we can improve on. Looking forward to our group meeting next week to dive deeper into our project plans.

1/16/2024: Group Coordination
We got together today to sync our schedules for the semester and brainstorm our project vision. It was productive to assign roles and responsibilities among the team members. Excited to see our plans come to life!

1/25/2024: Project Exploration
Today, we delved into researching various Microblaze projects to get a better understanding of our options. Each of us is checking out different projects to broaden our knowledge. Can't wait to see what we all come up with!

1/30/2024: Technical Hurdles
Started working on my project today but encountered some issues generating the bitstream. After troubleshooting, I finally got it sorted out. A small victory in the grand scheme of things!

2/1/2024: Refinement and Preparation
Today, we fine-tuned our project plans and prepared for our upcoming presentation. Some of us continued working on our projects, while others brainstormed ideas to enhance our presentation.

2/6/2024: Troubleshooting and Presentation Prep
We ran into some installation issues with Vivado 2018.3, which affected our FPGA programming. After identifying the problem, we got it fixed. Also, started dividing tasks for our presentation among the team.

2/8/2024: Successful Presentation
We delivered our presentation today without any hiccups. It was rewarding to showcase our progress to our professors.

2/13/2024: Evaluations and Planning Ahead
Completed our peer evaluations and then discussed our next steps. We brainstormed ideas for our upcoming tasks.

2/15/2024: Task Assignment
Finalized our backlog for this sprint and assigned tasks to each team member. Excited to work on adding new components to our Microblaze design and improving our web interface.

2/22/2024: Documentation Update
Today, as a team, we dedicated our efforts to updating our design documents to reflect the evolving scope of our project. Incorporating feedback received, we ensured our documentation accurately portrays our project's current state and future trajectory.

2/27/2024: Web Interface Enhancement
In our meeting today, we discussed and outlined improvements for our web interface to enhance its visual appeal and usability. With collective input, we identified features to implement and made significant strides in implementing some of these enhancements on the same day, ensuring a more user-friendly experience.

2/29/2024: Presentation Preparation
Commenced preparations for our next presentation, distributing slides among team members for discussion and refinement. Ensuring each slide effectively communicates key aspects of our project is crucial for a successful presentation.

3/5/2024: Presentation Progress
Today's presentation went smoothly, allowing us to showcase our project's advancements. Additionally, we made notable progress on the web interface's GPIO interaction, laying the groundwork for further development.

3/19/2024: Standardized Project Setup
Achieved a significant milestone by establishing a stable project design that can be uniformly set up on every team member's computer. This standardization minimizes potential discrepancies between individual designs, streamlining collaboration and troubleshooting processes.

3/26/2024: Sprint Kickoff
Commenced the final sprint with a focus on enhancing the web server's functionality to interact with the FPGA's GPIO, potentially expanding to include protocols like I2C or SPI. We delineated the sprint backlog and assigned tasks to initiate progress.

3/28/2024: GPIO Troubleshooting
Addressed issues with the button GPIO's communication with the web server, striving to resolve discrepancies hindering proper functionality. Leveraging successful LED GPIO interactions as a reference, we worked towards ensuring seamless integration of button interactions within the web interface.