Spring 2023 Project Plan

Milestone	Tasks	Description	People
Poster Day			
	Combining Information	Gathering information from all previous work	Pawel
	Future Work	Gather information of work still needed to be completed	Jared
	Create Poster	Design poster with size specifications in mind	Jared, Robert
	Review Rubric	Make sure the poster fits the needs of the rubric	Taylor
	Print Poster	Have TAs print the final poster	Segundo
	Attend Poster Day	Attend the assigned poster presentation	All
Finalize Design			
	Review Design Requirements	Review the requirements of the design	Taylor
	Discuss Problem Areas	Discuss issues with the current design	Jared
	Refine CAD	Remeasure and refine the CAD models	Robert
	Finalizing CAD	Finalizing CAD models to begin prototype 2	Segundo, Pawel
Rebuild Protoype			
	Convert CAD to STL	Convert CAD files to STL files for printing	Taylor
	Print STL Files	3D print the STL files to prepare for building	Segundo, Jared, Robert
	Assemble Prototype	Assemble the new prototype	Pawel
Test Prototype			
	Review Prototype Specifications	Review how the prototype should work	Pawel
	Ensure Prototype Performs	Make sure the prototype performs as intended	Taylor
	Make Changes to Prototype	Make changes to anything that does not perform well	Jared
	Rebuild Prototype	Rebuild the prototype with changes made	Robert
	Performance Check	Ensure the prototype performs as intended	Segundo
VDR4			
	Summarize Previous Work	Summarize work already completed before this point	Pawel
	Summarize Current Work	Summarize work already completed at this point	Robert
	Create Powerpoint Presentation	Use information gathered to create a powerpoint presentation	Jared
	Review Rubric	Make sure powerpoint presentation meets requirements	Segundo
	Submit VDR4 Powerpoint	Submit VDR4 presentation to Canvas	Taylor
	Practice Presentation	Practice presenting powerpoint	All
	Present Presentation	Present Powerpoint to professor	All
Update Bill of Materials			
	Determine Major Components	Make changes to the bill of materials to account for design changes	Pawel, Robert
	Check Vendors	Compare different vendors and their prices to determine the best one	Taylor
	Record Changes	Update the original BOM created in Fall 2023	Segundo
	Initial Order	Order the initial list of components and update dates/times/prices	Jared
Develop Virtual Simulations			
	Develop Motion Simulation	Create motion simulation in creo to check device movement	Robert
	Develop Vibration Simulation	Create a vibration simulation in drake to check oscillation patterns	Pawel
	Develop Friction Simulation	Create a friction simulation in creo between the parts	Taylor
Machining Parts			
	CAD Files to Machine Shop	Send CAD files to machine shop	Jared
	Send Material to Machine Shop	Send material to machine shop to begin machining	Segundo
	Update Status of Machined Parts	Keep an updated list of finished and in progress parts	Taylor
Build Physical Prototype			
	Review CAD Models	Review the CAD models to ensure proper assembly	Jared,Pawel
	Review Machined Parts	Review machine shop parts to make sure they are machined properly	Robert, Taylor
	Assemble Physical Prototype	Assemble the first physical prototype	Segundo
Testing			
	Run Motion Test	Run motion test to check that the ceramic does not fall off during stops	Pawel
	Analyze Motion Data	Analyze the data and make changes to the CAD models if needed	Jared, Robert
	Run Vibration Test	Run vibration test using accelerometer to make sure ceramic can handle the vibrations on the conveyor	Segundo
	Analyze Vibration Data	Analyze the data and make changes to the CAD models if needed	Jared, Taylor
	Run Dust Test	Run dust test to ensure that the device can handle the amount of dust at the facility	Taylor
	Analyze Dust Data	Analyze the data and make changes to the CAD models if needed	Segundo, Pawel
VDR5			
	Summarize Previous Work	Summarize previous VDR presentations	Pawel
	Summarize Current Work	Summarize work already completed at this point	Segundo
	Create Powerpoint Presentation	Use information gathered to create a powerpoint presentation	Jared
	Review Rubric	Make sure powerpoint presentation meets requirements	Robert
	Submit VDR5 Powerpoint	Submit VDR5 presentation to Canvas	Taylor
	Practice Presentation	Practice presenting powerpoint	All
	Present Presentation	Present Powerpoint to professor	All
Finalize Design			
	Review Previous Testing Analysis	Review the analysis from the previous testing	Taylor, Pawel
	Discuss Problem Areas	Discuss issues with the current design	Segundo
	Refine CAD	Remeasure and refine the CAD models	Jared
	Finalizing CAD	Finalzing CAD models for changes to the physical prototype	Robert
Build Physical Prototype			
	Review CAD Models	Review the CAD models to ensure proper assembly	Robert, Taylor
	Review Machined Parts	Review new machined parts or parts that had to be changed	Pawel, Segundo
	Change Physical Prototype	Make changes to the second physical prototype	Jared
Testing			
	Run Motion Test	Run motion test to check that the ceramic does not fall off during stops	Taylor
	Analyze Motion Data	Analyze the data and make changes to the CAD models if needed	Pawel, Segundo
	Run Vibration Test	Run vibration test using accelerometer to make sure ceramic can handle the vibrations on the conveyor	Robert
	Analyze Vibration Data	Analyze the data and make changes to the CAD models if needed	Jared, Taylor
	Run Dust Test	Run dust test to ensure that the device can handle the amount of dust at the facility	Segundo
	Analyze Dust Data	Analyze the data and make changes to the CAD models if needed	Pawel, Robert
Finalize Evidence Manual			
	Review All Previous Submissions	Review comments and edits on all previous evidence manual submissions	Pawel, Segundo
	Make Changes to Evidence Manual	Make changes from the previous review	Jared, Robert
	Submit Final Evidence Manual	Submit the final evidence manual to canvas	Taylor
Engineering Design Day			
	Summarize Previous Work	Summarize work already completed before this point	Pawel
	Summarize Current Work	Summarize work already completed at this point	Segundo
	Create Powerpoint Presentation	Use information gathered to create a powerpoint presentation	Jared
	Review Rubric	Make sure powerpoint presentation meets requirements	Robert
	Submit VDR6 Powerpoint	Submit VDR6 presentation to Canvas	Taylor
	Practice Presentation	Practice presenting powerpoint	All
	Present Presentation	Present Powerpoint to professor	All
	Prepare Poster	Complie information for poster and edit previous poster	Pawel, Taylor
	Practice Elevator Pitch	Practice presenting elevator pitchs for poster	All
	Present Poster	Present poster to audience in attendence	All
	Evaluate Other Poster	Review other groups posters and ask any questions	All
	Watch Other Presentations	Watch other groups present there project and ask any questions	All
	Network With Industry Professonals	Connect with industry professionals and get information about being in the industry	All
Finals			
	Study for Finals	Prepare for any finals that are needed to be taken	All
	Take Finals	Pass finals	All
Graduation			
	Prepare Cap and Gown	Make sure cap and gown are ready for graduation day	All
	Graduate on May 6, 2023	Attend graduation	All