

Stakeholder: Professor Jesse Roberts

- Project Proposal
 - Introduction comments
 - Zoom in on more of the problem and what you're addressing, the only thing you should reference about the previous team is that you are taking a system built by them
 - Do not focus on the other team so much, focus more on what problem you are specifically addressing.
 - A precise work calculator gives us the ability to recreate the trail data
 - Your problem: There is no way with the system as it stands to accurately replay the trail
 - Your solution: Add a work calculation system to make replaying the trail as accurate as possible.
 - "I want to be able to put the camera feed on the screen, ride the trail with the resistance proportional to where I am on the trail and the screen roughly speaking showing where I am on the trail."
 - Wants audio for the trail and wants small speakers to output this audio
 - The Main is to implement RRK with a system to calculate work done, add audio to the kit with the small external speaker to output, and use frame rate interpolation to create a smooth visual experience
 - Does not care about this main focus is RRK
 - (In reference to 10% on the work monitor) look at commercial systems and see what is a reasonable measurement error based on this, you most likely are not going to be able to beat a commercial system and look at the relationship between power and work
 - (In reference to visual appeal) change wording didn't know what we meant.
 - Constraints
 - Talking more about the constraints in what you are trying to do such as constraints in measuring work done on the system.
 - Intake sound (relevant sounds), make video smooth,
 - What are the constraints that are going to hold us up from making this experience as immersive as possible
 - Standards
 - (reference to last safety standard) You can say this standard but have a bullet point underneath that specifies what the purpose of the standard is.
 - Measure of success
 - State what you are going to measure/quantify to have results that prove success
 - Distance measurement and force measurement
 - The point of this is how "YOU" are going to judge the success of your project
 - Open-minded to how Team 5 would like to quantify success
 - Team 5 Top-Level Solutions

- Only include the part we are going to use to get to our solution

- Side note
 - Get the pedal system to measure the force applied to the pedal (power meter)
 - Magnetic read sensors for measuring the bike out in the field
- Experimentation (In reference to the measure of success)
 - Buy a power meter to measure the force you are exerting on the bike, bike a certain distance with it recorded, and then put it on the test bike in the lab with the power meter attached to see how much work you're doing.
- Conceptual Design
 - Make an outline for all the sections you intend to have
 - Make your block diagram
 - Make your gant chart
 - Fill out 60% of your outline