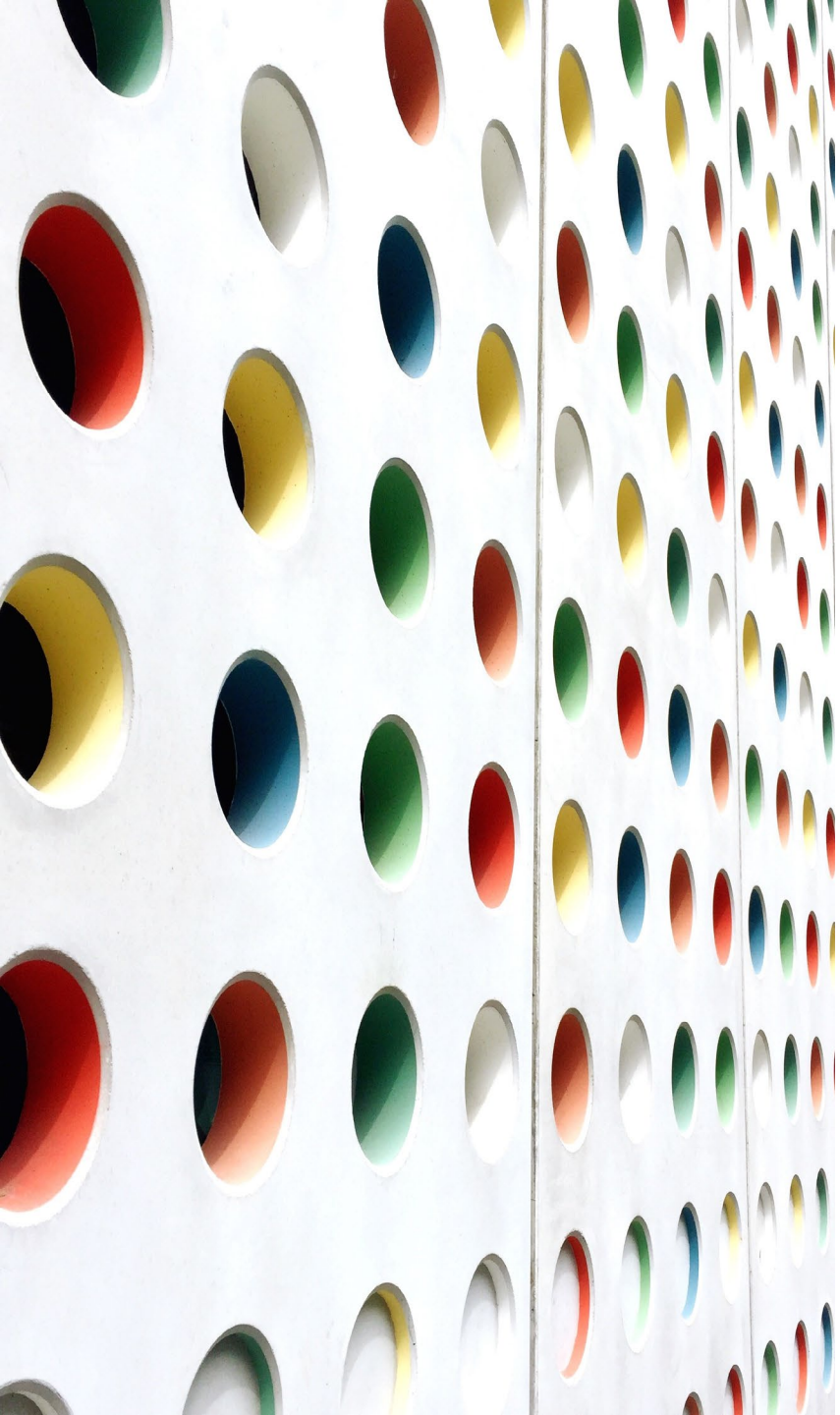


ME General Capstone

MECHENG 4900 – SP23

Dan Wisniewski, Lecturer
Department Of Mechanical & Aerospace Engineering
The Ohio State University

wisniewski.28@osu.edu

Outline

Background

Class Goals

Projects

Background

Experience

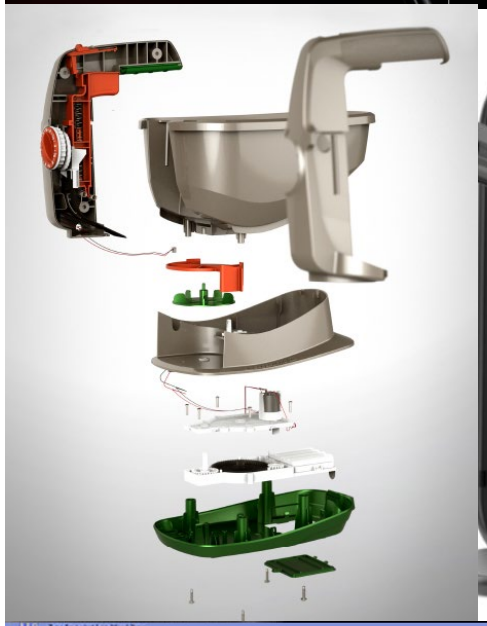
The Ohio State University
B.S. in Mechanical Engineering
M.S. in ISE - Focus on Product Design

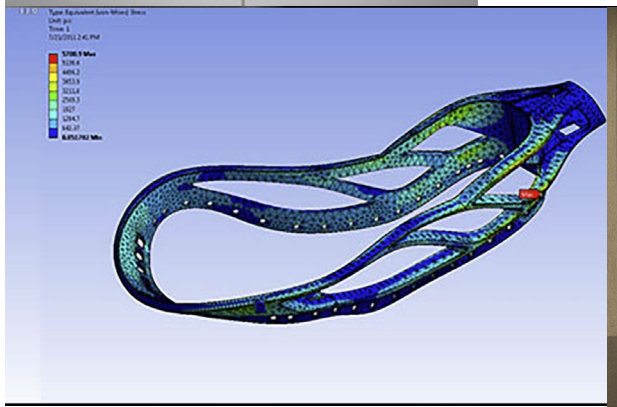
Priority Designs 11 yrs
Industries

- Sporting Goods
- Home Goods
- Medical Devices
- Industrial/Military

Expertise

- Advanced CAD
- Mechanisms
- Conceptualization/Brainstorming
- Design for Manufacturing
- Project Management
- Marketing Strategy
- UI/UX





Experience

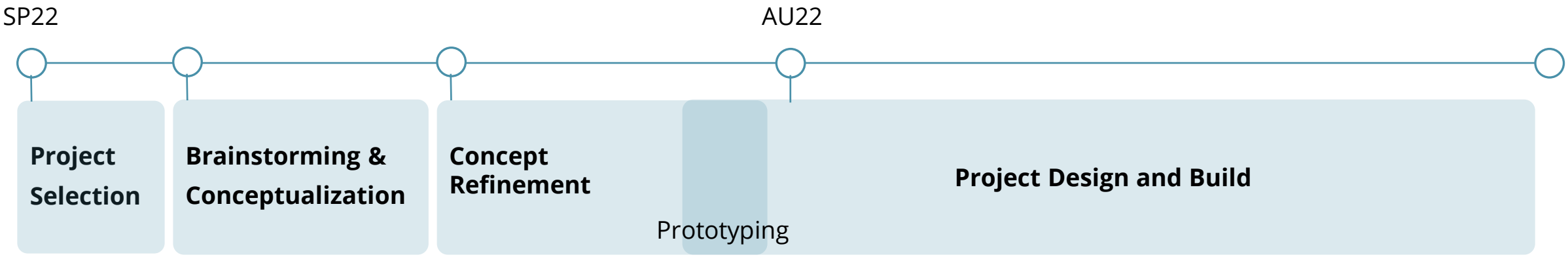
D&W Elements

Founded and own an e-commerce business; posters, stickers, apparel and greeting cards

dandwelements.com

Class Goals

Class Overview

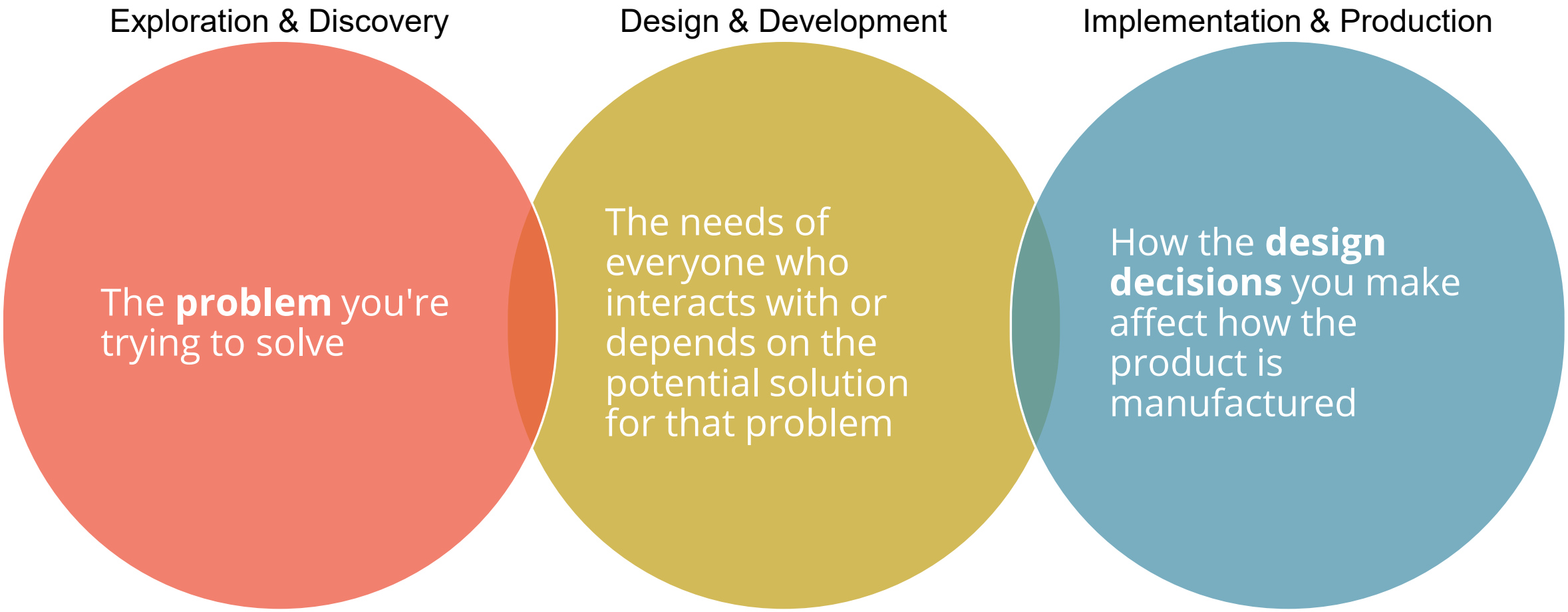


Goals

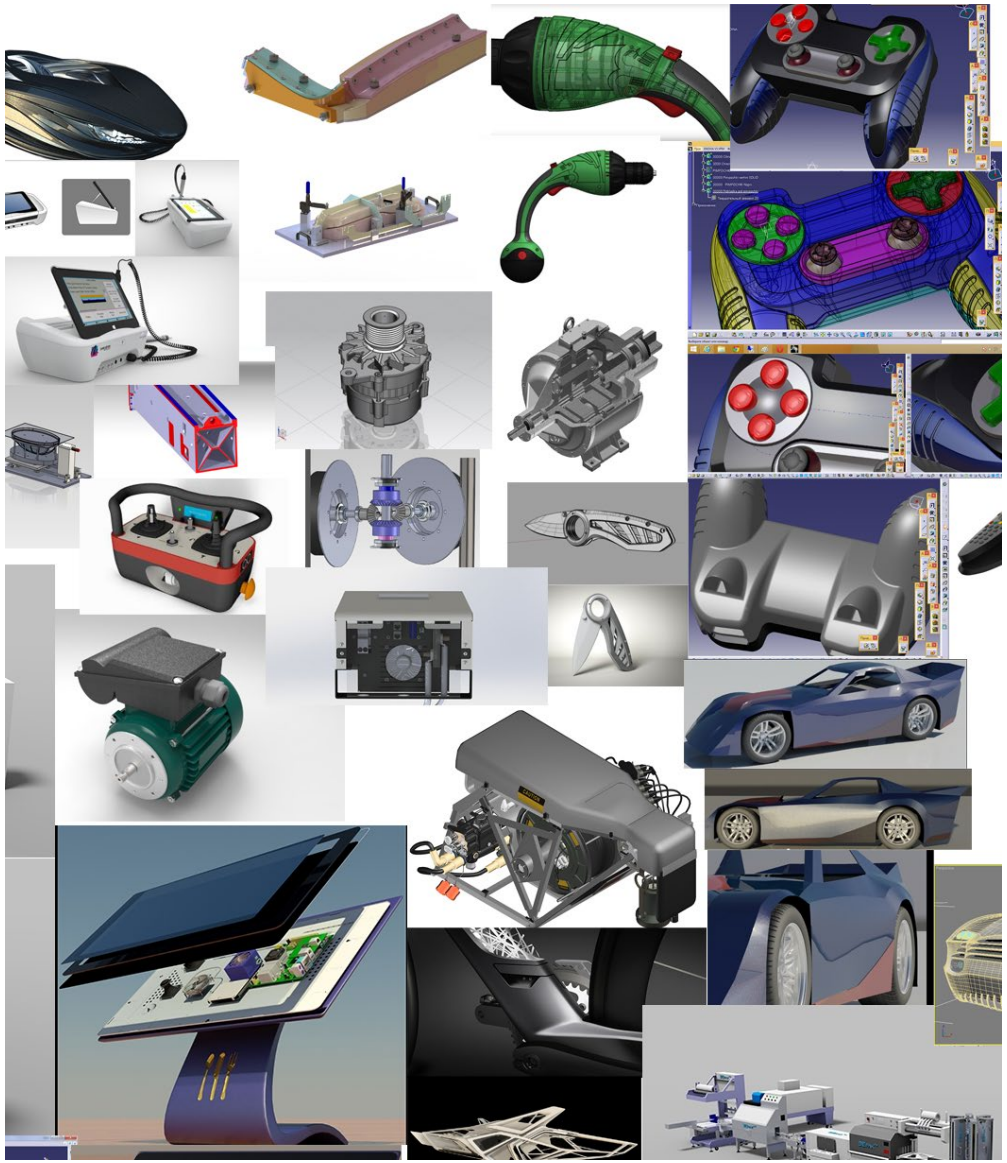
- Students will gain an understanding of the design process and how to balance constraints.
- Focus on your visual communication skills. (presentations and portfolios)
- Improve on storytelling and communicating your ideas.
- Create a comfortable and safe speaking environment
- Develop professional and project management skills and how it applies to the design process
- Help the students grow as engineers, professionals and people.

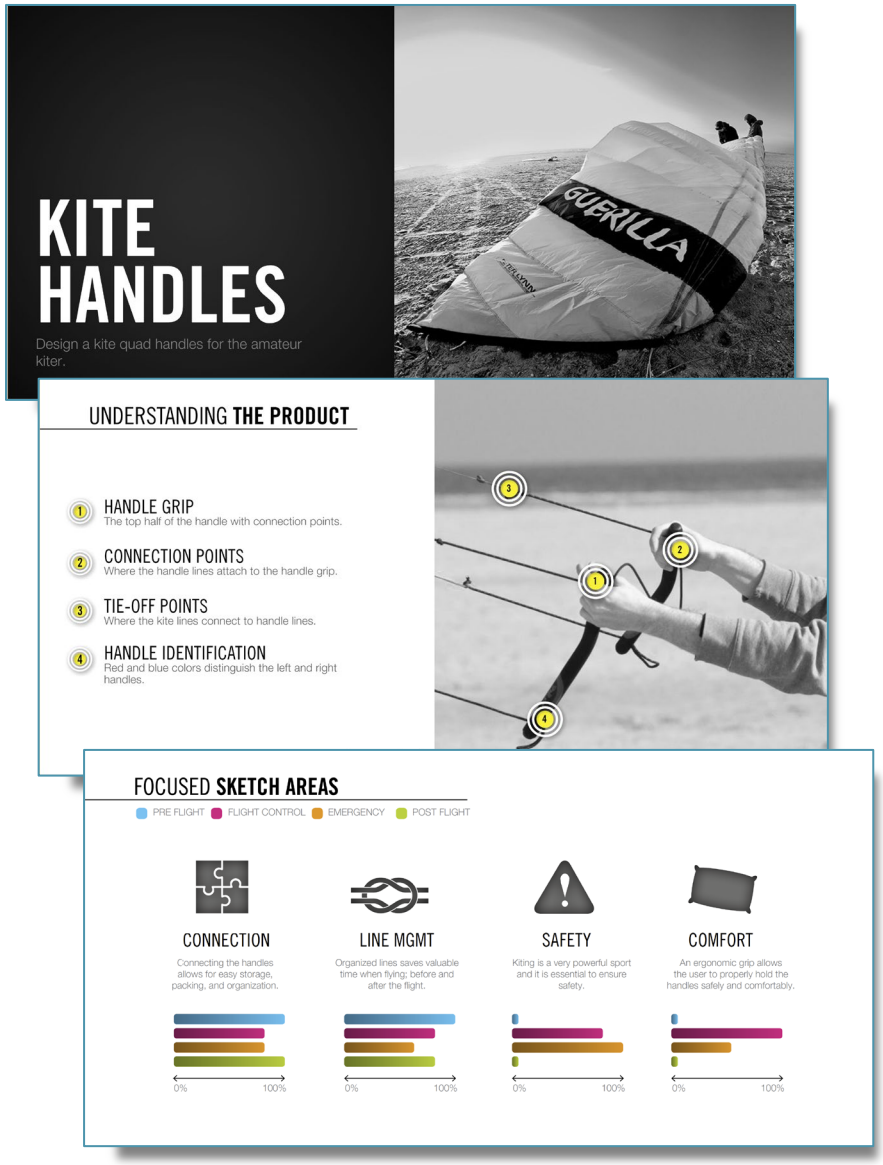
Design Process

You will be able to understand the following, at a deep level:

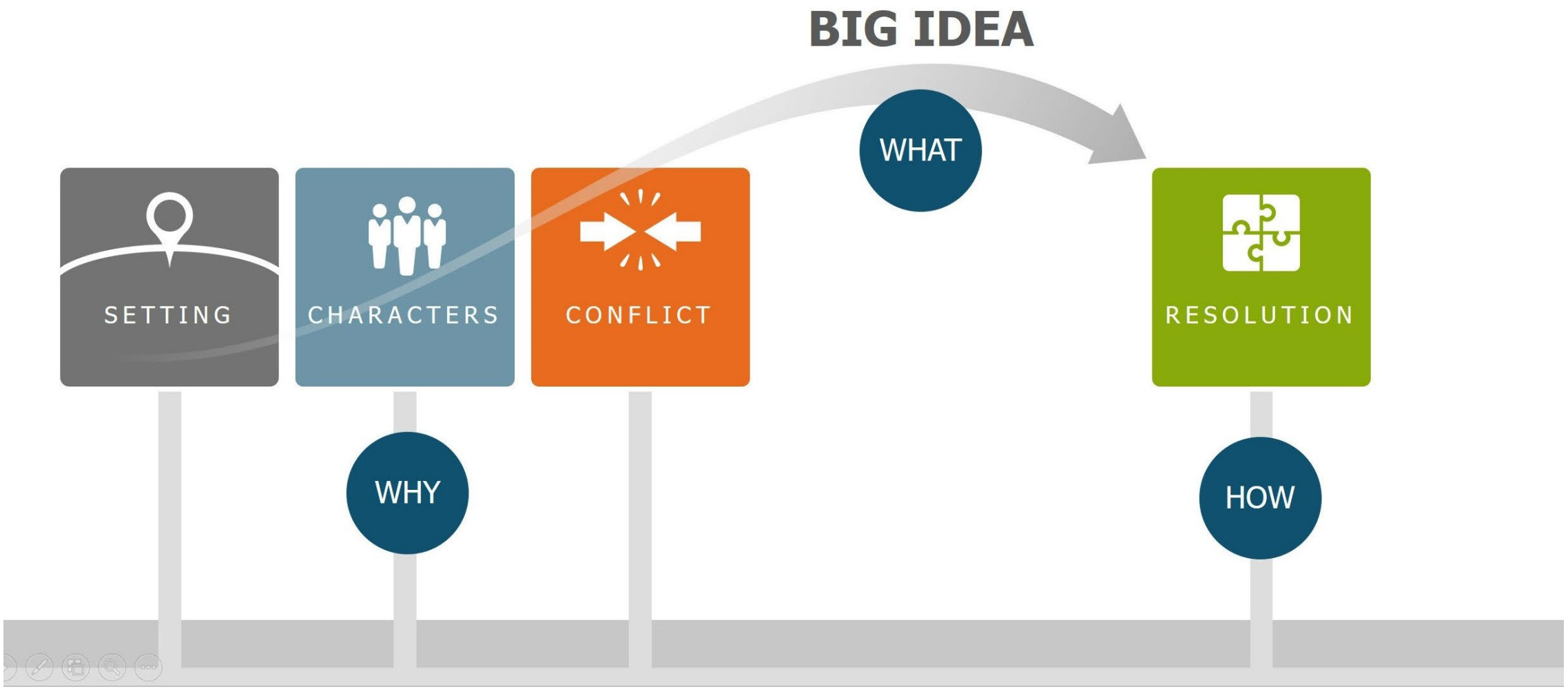


Visual Communication





Storytelling and Communication



Project Management

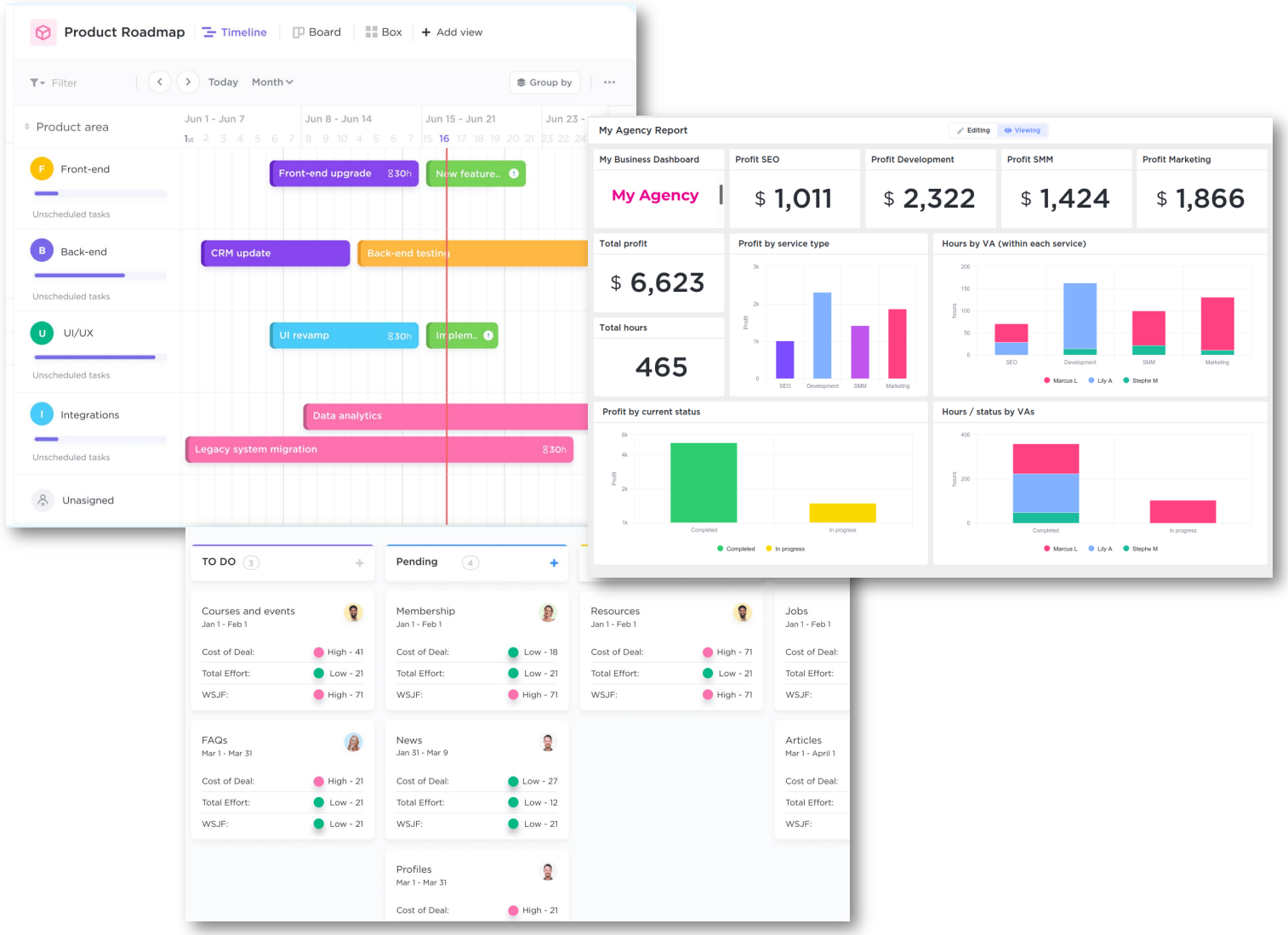
Project Planning

Time Management

Working with a Team

Assigning Tasks

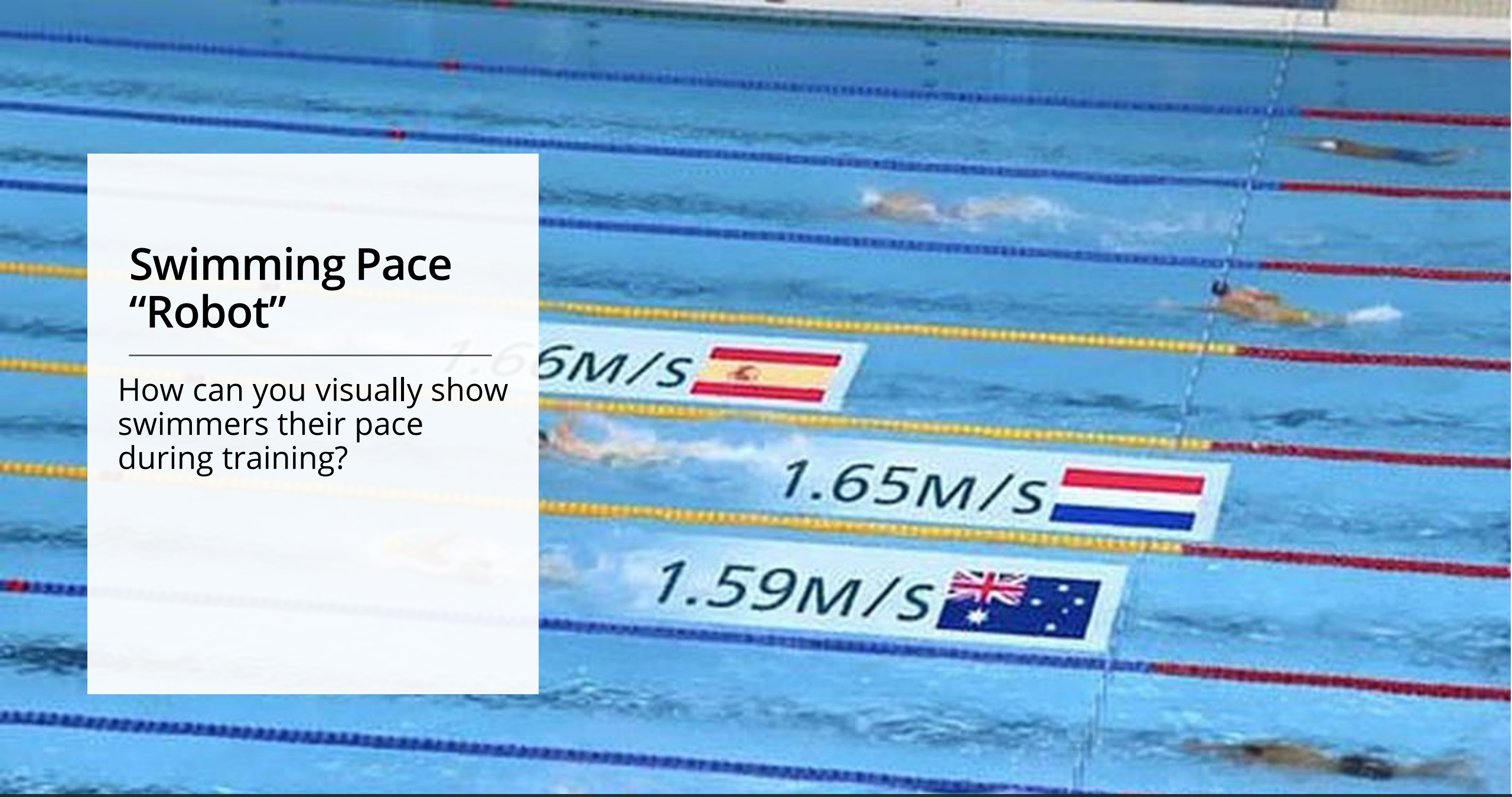
Budget Tracking



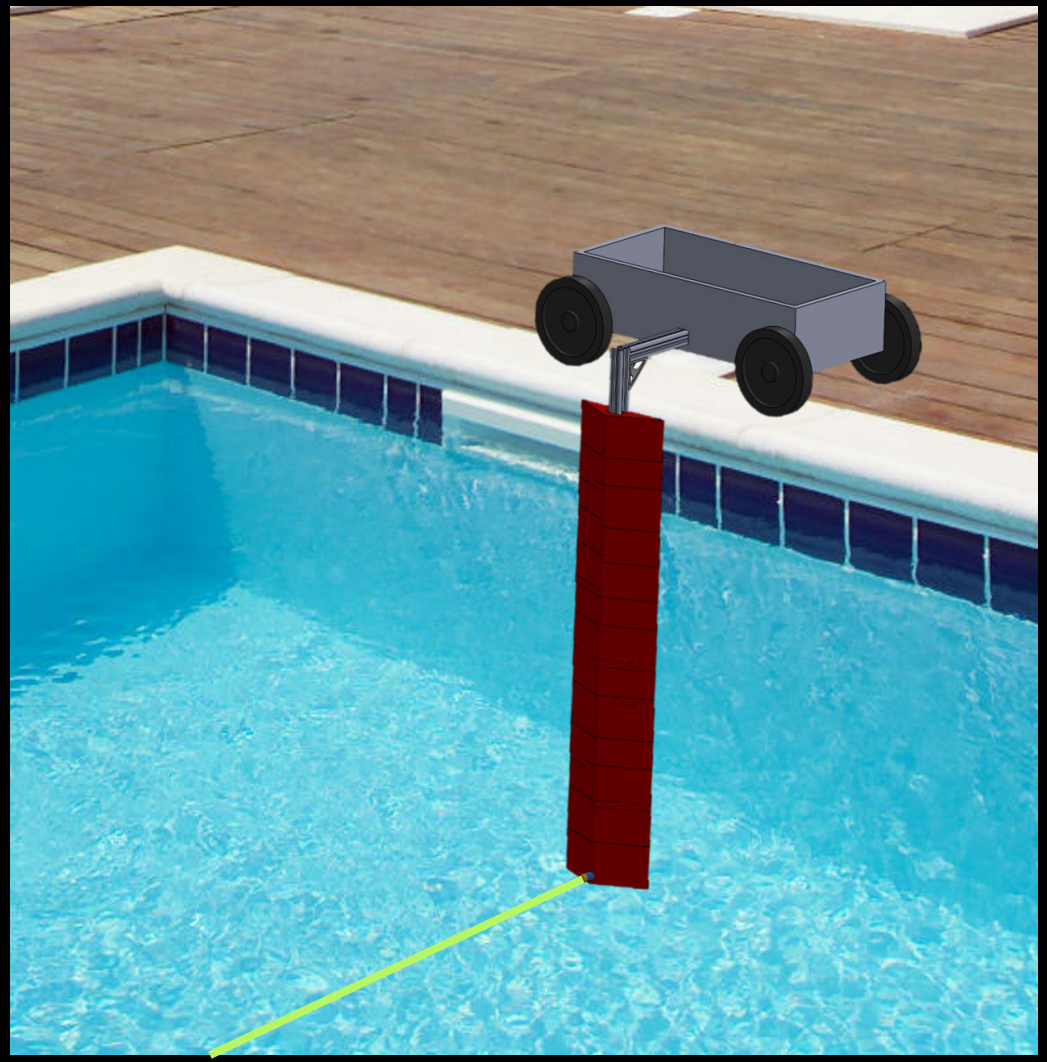
Projects

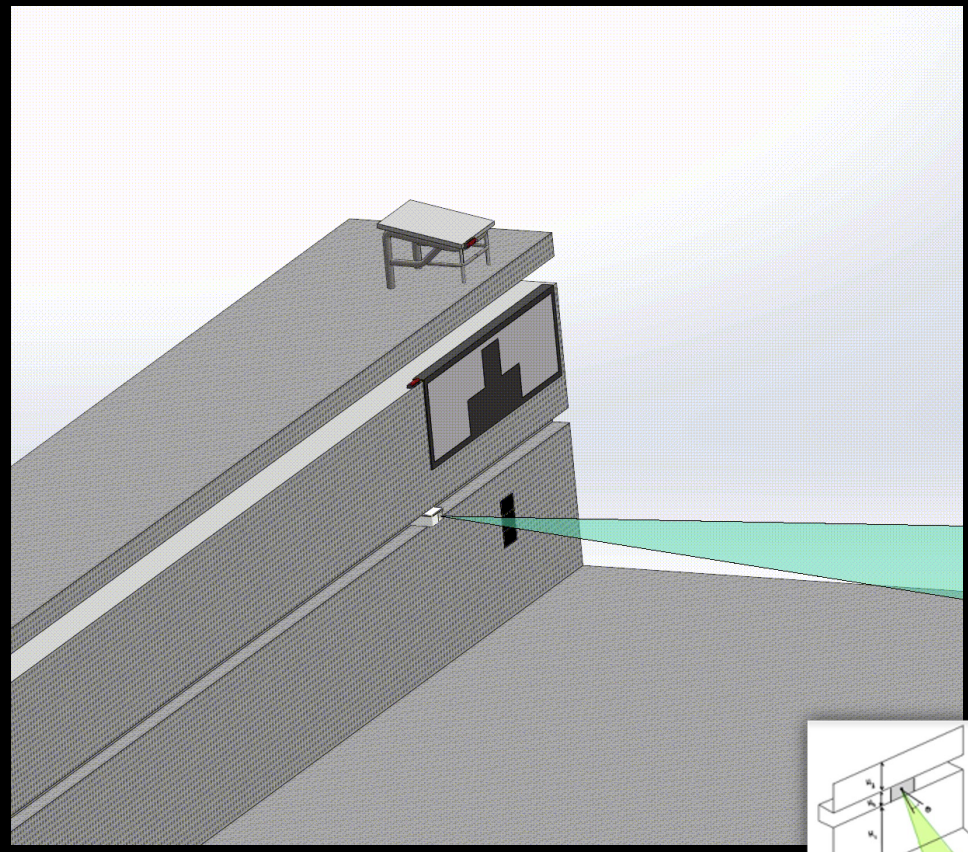
Swimming Pace “Robot”

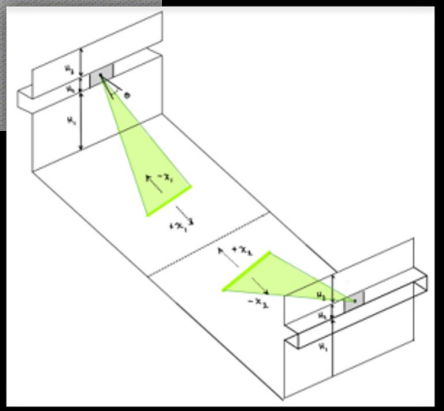
How can you visually show swimmers their pace during training?



Swimming Pace “Robot”







Other Projects

Soccer Ball Training Launcher

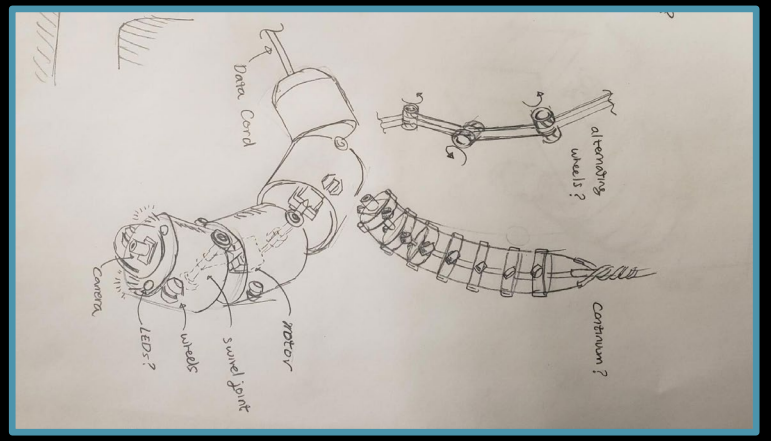
Pipe Inspection Robot

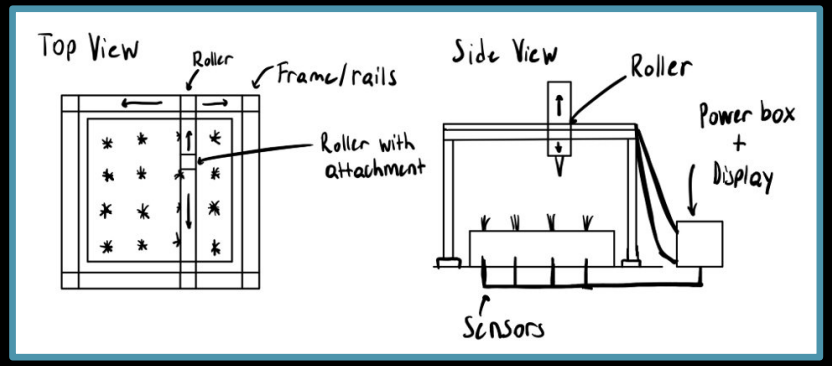
Automated Plant Growing System

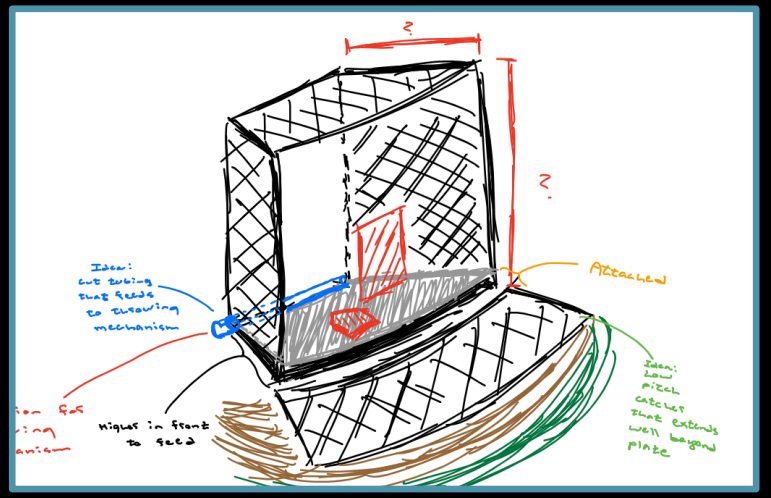
Baseball Pitcher Training Net

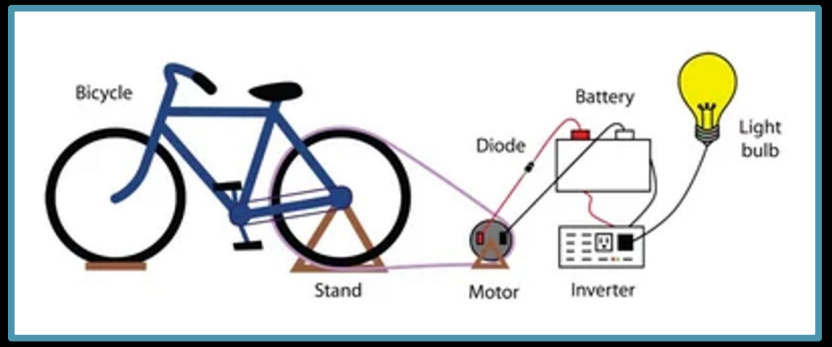
Bicycle Pedal Assist

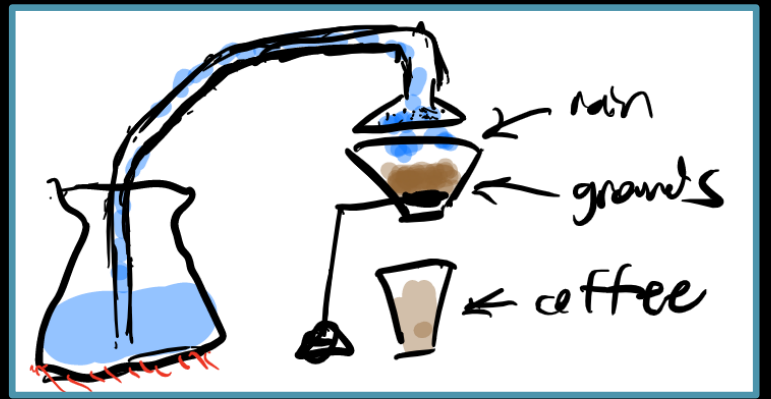
Coffee Alarm Clock











Thank You

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