

Original Problem

- Restricted access to lab documents.
- Disorganized experiments documentation. Organized by course number only, with 8 character name.
- Experiments disappearing from memory. ie, crater lab, or projectile motion.
- Equipment stored in 16 different rooms.
- Equipment of unknown purpose taking up space.

Problems with former attempts

- Heavy reliance on convention and standardization.

The Solutions

- Organized Lab Documents - Archive.
 - **Archive pdf and source code of what students use, since that is what their comments and subsequent edits will be based on.**
- Department Wide Access to Information.
 - **All faculty and staff have access with their UCIT login information. If you don't let me know.**
- Transferable Knowledge.
 - **Place to hold all important information about a lab. Equipment, original papers, data, etc..**
 - **Not all information is there, but there is now a place to put it**
- Platform for Collaboration.
 - **Will show more details when dealing with use cases.**
- Foundation for Future Development.
 - **We can build on the shoulder of those before us.**
- Created Room to Grow.
 - **Remove what we don't need and create more physical space.**
- Tools for Ease of Upkeep.
 - **Tools for maintaining, manual for administrator.**
- Mobile friendly.

Use Cases

Instructor

- What did the last instructor do?
 - **211 -> 2017 -> Fall**
- What labs do we have for an Optics course?

- **clear filters -> Optics -> most recent**
- What labs do we have on waves?
 - **clear filters -> Wave Mechanics -> most recent**
 - **clear filters -> Wave Mechanics -> most recent**
- What math skills are required?
 - **drop down menu on standing waves**

Lab Developer

- I want to make changes to the current labs for my course?
 - **211 -> 2017 -> Fall -> ZIP**
- Is there any background info on this lab?
- Is there a template for a spreadsheet?
- Do we have a lab on "Ampere's Law"?
 - **clear filters -> search "Ampere"**
- Time to build a brand new lab?
 - **main page -> Instructor -> Lab LaTeX template**
- How where those diagrams made?
 - **main page -> Instructor -> Tikz LaTeX example - view**

Developing a new Experiment Slide

Technical Staff

- What equipment is needed for the lab?
 - **211 -> 2017 -> Fall -> Static Equilibrium of a Balance Beam**
- How many labs is this equipment used in?
 - **211 -> 2017 -> Fall -> Static Equilibrium of a Balance Beam**
- What is this item, and why do we needed it?
 - **inventory -> ST037 -> C3 -> Fluke Multimeter**
- What equipment needs attention?
 - **inventory -> 1-2 -> Fluke multimeter**

Future Work

- Continue to populate disciplines and topics
- Authentication
- Host Simulations
- Demonstrations