Final Project Biography

Framing:
The main problem I am attempting to solve centers on time efficiency while also trying to limit wasted paper. While working at the Police Academy I have been able to sit in on classes taught by hundreds of instructors across dozens of subject matters, and almost all of them have a different routine for taking introductory information from the new police recruits. My goal was to find a uniform streamlined this process that is easier for the instructors as well as the students that cuts down on wasted paper and time.

Research:
Currently there are several ways Instructors gather the information they need about recruits.
   A. In class intro/icebreakers.
   - Some instructors use class time (a significant portion depending on the size of the class) to go around the room and have each recruit introduce themselves and provide a few key pieces of info i.e. Sponsor agency, level of education, and experience in the subject.
   B. Paper forms filled out during class time.
   - Some Instructors prefer to have a form on file that they can reference back to throughout the Academy. This requires the Instructor to use class time to have the recruits fill in the blanks, and then even more time on the back end for the Instructor to sift through paperwork to get relevant pieces of information. Such as this Example which is one of 12 forms filled out for safety throughout the Academy.(Unfortunately the "Old Guard" weren't ready to let me modernize these Safety sheets.
   C. Go in blind.
   - Lastly, some Instructors have too little time for the amount of material they need to cover in class. These Instructors just jump right into teaching and take no time to get to know the individuals in the class. This means a lack of personalization for that class and tends to lead to Instructor evaluations with lower scores from the students.

Prototyping:
First, following the footsteps of previous projects in this class, I created a basic flow chart. This helped get a basic order down.

Next, my hope was to use Weaver to take existing forms and easily input them into Docassemble. Unfortunately, because most of the instructors have been using photocopies of photocopies for their forms, I didn't get any digital copies.

I next looked to Q&A markup to create basic questionnaire as a proof of concept. Q&A Markup

Finally, I began creating the project on Docassemble. This allowed for a little more customization, although it did limit my ability to share with others, but thanks to my

Call with Professor Colarusso on 12/04/2023 I was able to decide on short and long term solutions for testing.

User Testing:

While I did have one partner willing to help with testing and providing feedback, the main source of testing was myself running though the questionnaire attempting to choose every variation of answer choices.

My coworker and I were able to meet in person and go through this project. This lead to several helpful refinements and then again after my call with Prof. Colarusso I was able to send out the working link to have him test more on his own.

Refinement:

Thanks to being able to have two rounds of testing, one in person session and one after I was able to send my partner the link to do some testing free of me looking over his shoulder there was good feedback and adjustment and then testing of that adjustment.

The main critiques of the project from my coworker were output and branding, in addition he had a couple more pieces of info he wanted specifically for his topics of instruction.

1. Output – originally, I was attempting to output into a form that looked similar if not identical to what the Academy has students hand fill. But this created the same problem of needing to sift through paperwork to get to relevant data. The solution was to have the questionnaire output info that could be easily thrown into a spread sheet that could later be sorted by class and question.
2. Branding – Everyone loves to see their own logo. In an attempt to get a better reception from the Academy staff I added the MPTC Logo to the pages making this look more like an official site from the Academy to the students.
3. Additional questions – My partner specifically teaches Defensive Tactics at the Academy; he asked the height and weight be added to the demographics questions in order to help him better sort the class into partners and groups for training. This allows him to have partners for certain physical tasks presorted instead of letting the students pick their friends every time which tends to lead to lackluster effort on their part.

Intro Pitch:

Always volunteer to go first!

Complexity/Robustness:

This project is certainly not the most complex, somewhat by design. Prior to submitting this form, we don't know what level each student is at in regard to education or technical skills. Have an online form that ensures each question is answered appropriately, although no guarantees made that they are answer accurately, (who hasn't lied about their weight)

Likewise, the level of skill on the part of the instructors consuming the data varies greatly. The Academy has Lawyers teaching Crim and Con law, EMT's teaching first aid

and Veterans teaching Drill and ceremony. Keeping it as simple as possible, especially in the initial offering will assist with gaining acceptance and allow the project to grow into the users that need it.

Impact & Efficiencies:

The time savings is twofold, first for the recruits and then for the Instructors. Students will be able to sit at home and in the matter of 10 minutes answer all of the intro onboarding questions for each instructor without having to repeat answers or fill out similar if not identical forms for different classes. Likewise, the instructors will be able to save time in class as well as their personal time sorting through the information. I can't say that this directly ups revenue by more than 5% but time is money.

Fit/Completeness:

The output is a work in process, as the initial plan to fill in a form similar to existing options was not what my coworker was looking for. The process of getting the data into a spreadsheet leaves room for improvement once we determine what program we will use for actual implementation.

Given the option between hand jamming dozens of forms with repetitive questions or taking a guided interview once from the comfort of their own home I think overwhelmingly recruits would choose the latter. Instructors might be a little more difficult to pull from their past practices but with time I believe they will see the value in a program that save time and makes data gathering/sorting easier.

Documentation:

I'm not one who usually gate keeps information/processes however, I don't have enough faith in my coworkers to give permissions to add/subtract from the code, so no information is provided to users on the program itself. Several "Help" buttons were added throughout to assist recruits with including the correct information.

Real World Viability/Sustainability:

With the positive feedback the Academy has allowed me to move forward with creating this in a program that will allow for real world use. Once the MBTA returns from holiday break there will be a meeting with the IT team to determine the available programs and where to host the site.

With the ease of being able to update the questionnaire and output this will easily be able to grow and adapt to the needs of current and future Instructors**.**

Links:

Example of existing form - https://jefreytaylor.github.io/ctl/DT%20SafetySheet%20Sign-Off.pdf

Early concept flowchart - https://jefreytaylor.github.io/ctl/Final_Project%20flowchart.JPG

Initial Q&A version - https://jefreytaylor.github.io/ctl/Final_ProjectQ&A.html