**SoftDes Final Project Proposal -- SlAIdes**

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1. ***The Big Idea:*** *What is the main idea of your project? What topics will you explore and what will you generate? What is your minimum viable product? What is a stretch goal?*
   To have a presentation software that creates a presentation/slide deck in real time according to audio commands interpreted from the speaker. The MVP of this is explained in question 3. To go beyond this, we have plans to expand in every direction off of the baseline of what is outlined there.

2. ***Learning Goals:*** *What are your individual learning goals for this project*
   **Louise:** have half a clue of machine learning and general good process stuff
   **Margaret:** learn some visualization tools and front end stuff, understand machine learning stuff.
   **Jared:** To deal with realtime audio processing and api calls, possibly also frontend graphical design. (Maaaaybe in JS? Or just not pygame) Also, project development on a longer than one week timescale.
   **Lauren:** Make a thing that does a thing. Understand and implement Machine Learning!! Possibly mess around with other languages if it comes up, but that's not a priority.

3. ***Implementation Plan:*** *This will probably be pretty vague initially. Perhaps at this early juncture you will have identified a library or a framework that you think will be useful for your project. If you don't have any idea how you will implement your project, provide a rough plan for how you will determine this information.*

   We're gonna do a lot on Saturday (as in a mini-hackathon to implement the baseline of what we're currently thinking) and maybe pivot after, depending on how that goes and how feasible it seems to continue down that path. Or know what we're doing.

   Rough framework:
   Audio in -> SphinX speech to text -> some command framework -> pygame frontend

4. ***Project schedule:*** *You have 6 weeks (roughly) to finish the project. Sketch out a rough schedule for completing the project. Depending on your project, you may be able to do this in great specificity or you may only be able to give a broad outline. Additionally, longer projects come with increased uncertainty, and this schedule will likely need to be refined along the way.*

   **Week 1:** Saturday Hackathon to figure out feasibility and basic project parts.

Possibly reassess and retarget.
**Week 2:** Do things as planned after Saturday Hackathon. Assuming things A-OK, try and get a good working MVP.
**Week 3:** Do things as planned after Saturday Hackathon. Break MVP to start implementing the depth in areas we want to pursue.
**Week 4:** Plan to have the project mostly complete? So when we get behind (which is inevitable to some extent) we can get our stuffs taken care of
**Week 5:** Overflow week
**Week 6:** Overflow week

5. ***Collaboration plan:*** *How do you plan to collaborate with your teammates on this project? Will you split tasks up, complete them independently, and then integrate? Will you pair program the entire thing? Make sure to articulate your plan for successfully working together as a team. This might also include information about any software development methodologies you plan to use (e.g. agile development). Make sure to make clear why you are choosing this particular organizational structure.*
   Group programming sessions rather hackathon style, along with some structured pair programming. When pair programming happens, plan to do different components with different partners so we all get a chance to work with each other. Definitely Lean dev on the front half, with AWESOME BACKEND YEAH agile practices?.

6. ***Risks:*** *What do you view as the biggest risks to the success of this project?*
   - Voice to text might not be good enough
   - Can't implement more organic/flexible rule framework
   - All visual frontends are *cough* "No Bueno" *cough*
   - It's haaaaaaarrrrrrddddddd/isn't in the scope of this project/timeframe

7. ***Additional Course Content:*** *What are some topics that we might cover in class that you think would be especially helpful for your project?*
   Basics of ML, for the concept of training text to speech on a different dataset. +1
   Interfacing with other hardware.