Future Presentation - Research Deliverables

Team:

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Long term Goals:

To identify current limitations and outdated practices with existing form of communications and analyze as to why they are ineffective. Overcoming these limitations by proposing more collaborative, interactive and user adaptive solutions to make presentations a more fruitful experience for both the presenters and the audience. In addition to this, leveraging emerging and future technologies and trends to come up with potential solutions that can be implemented in the near future to mitigate the problems that can't be solved with today's technology.

Challenges:

1. What are the limitations with the current tools and technologies that prevent us from implementing certain solutions?
2. How can we be sure of what technology might come up in future?
3. How to ensure whether all the requirements are fulfilled?
4. How open will people be to future solutions replacing current tools?
5. How can we predict effectiveness of potential solutions in future without any user feedback?
6. How can we ensure that solutions we propose are cost effective?

Tasks:
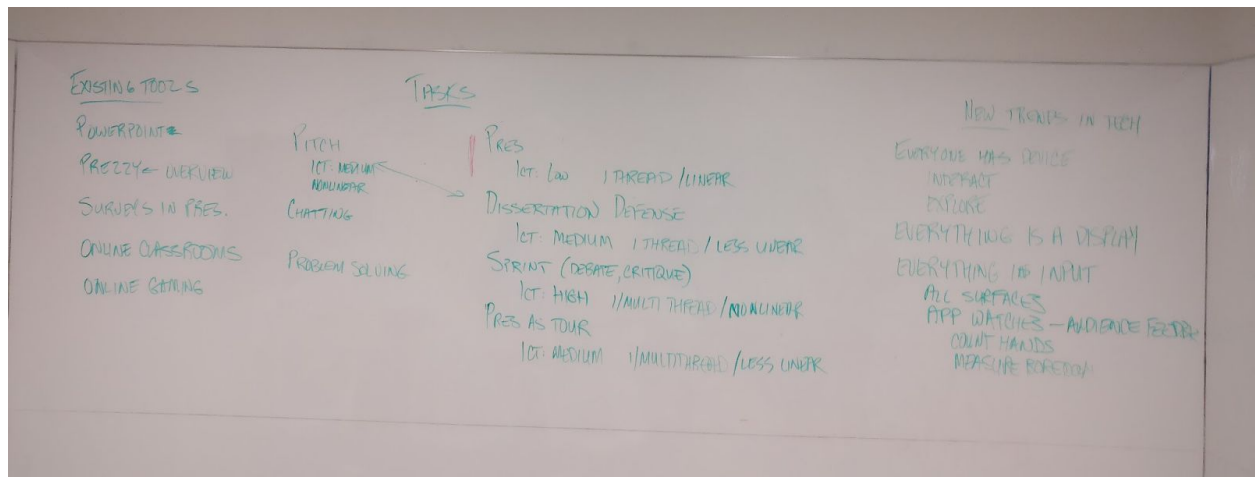
After a preliminary discussion with Prof Watson, one of the subject matter experts in this project, and a brainstorming session within our group, we chose to go with 'Presentations' and 'Presentation as a Tour' as our areas of focus with respect to this project.

Experience Map for Presentation:
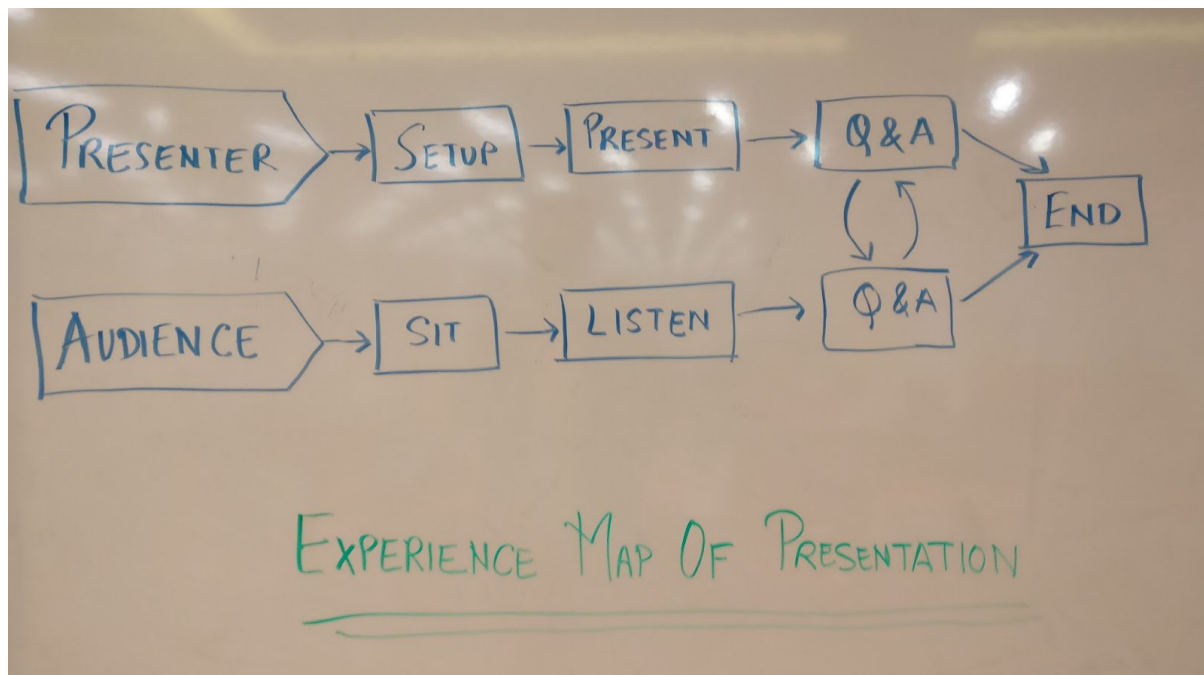
Experience Map for Presentation As a Tour:
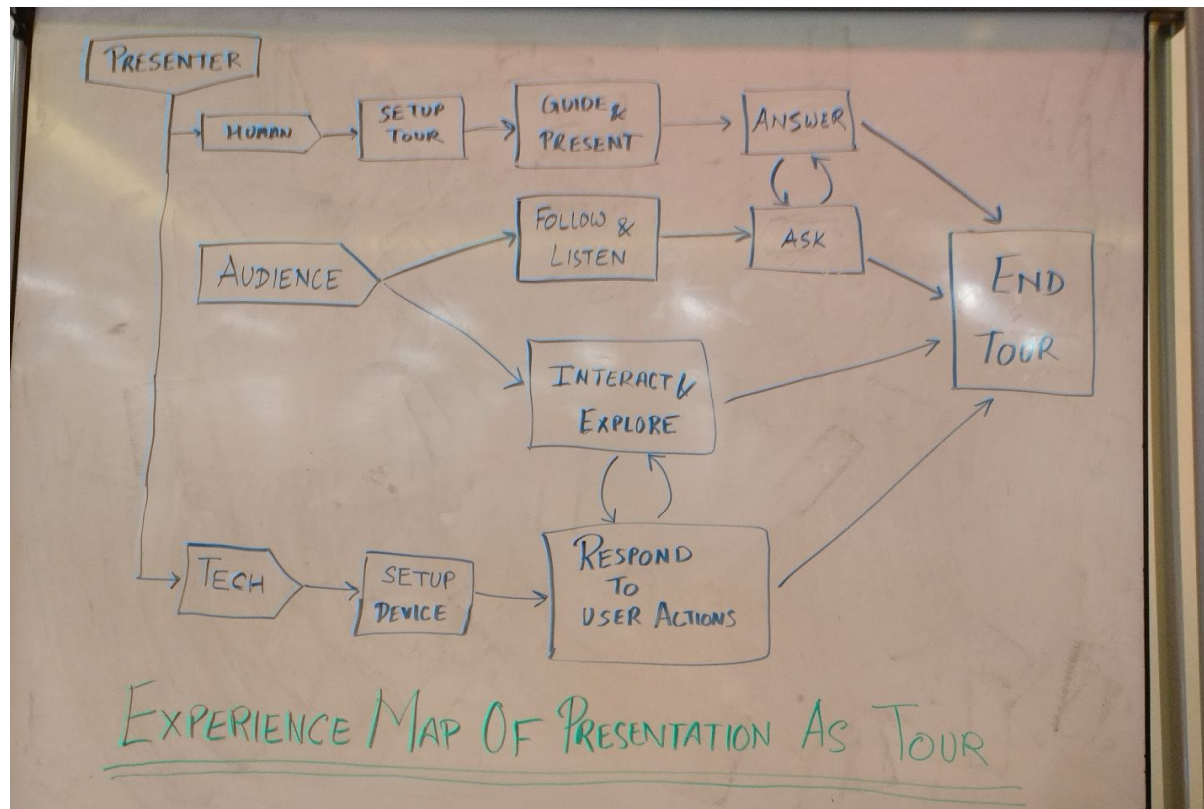
Problems/Opportunities:

Presentations:

From Presenter's perspective:
- The presenter cannot move back and forth between slides.
- It is very static, cannot update the presentation on the go
- Difficult to receive feedback

From Audience's perspective:
- Presentations have a linear flow
- Presentations can get very boring, dull
- Not very interactive
- Since the content is pre decided the audience can't choose what they wish to see

Presentation as a tour:

- If given to a group, not adaptive with different users, some might lose track
- Modification is not that simple

- Not an apt presentation mechanism for all topics
- If it is based heavily on technology, it can become expensive.Thus, not all places can afford this
- If given by a person: environmental factors, group should remain together
- Operating some of the devices (for example a kiosk machine) might be an issue for people who aren't tech savvy.
- Can't put forth questions if presentation is completely technology oriented
- Language can be a barrier for some

Expert Notes:

Shirley -
She introduced us to the Viz Lab and its infrastructure and the technologies driving the lab and displays in the Hunt Library.
- Introduced the projectors used in lab, all the projectors in the lab are from *christiedigital*
- All these equipment is expensive to maintain and hardware setup is difficult
- She introduced us to Stereoscopic Projectors which used left/right eye combination to make 3d digital images/videos which can be viewed using the IR enabled Active Glasses
- Laser projectors are cheaper than stereoscopic ones, don't need lamps or light engines to drive them, quality wise they are as good as stereoscopic ones
- For presentation the lab has 10 displays that can incorporate a maximum of 16k resolution
- We can have inputs from 6 different sources simultaneously to these displays.
- The library has large displays, which are a combination of numerous rectangular tiles called microtiles. These work in tandem to display one single source of information, like a web page on chrome browser.

Turner/Watson -
Turner was impressed with the progress so far, especially the framework of experience map of presentation as a tour. He also had a few helpful suggestions on how to proceed and which areas to focus on such as:
- Tighter connection between audience and presenter/guide during a presentation
- Accommodating people with varied interests and pace of learning
- Increase interaction by enabling the presenter to react to the audience
- Giving the audience the flexibility to pursue their areas of interest in depth
- Generating views similar to a timeline where the viewers can gain an overview of presentation as a whole like https://xkcd.com/657/large/
- Dynamic additions and notes to presentations can be useful and compelling,
- Jotting down notes on slides during the presentation and saving them later. This can be really helpful in educational presentation where a teacher has to provide a solution to some question.
- Presentations can be made more appealing by incorporating multiple presenters instead of just one

- Machine Learning can be helpful in coming up with different templates for the presentations that might help presenter structure the content easily
- We can develop a mechanism to make presentations accessible to an international audience by translating languages on the fly