XR MOOC Specialization Course 2: User Experience & Interaction Design for AR/VR/MR/XR Dr. Michael Nebeling

Assignment 1: Design Critique

Welcome to your first honors track assignment in this course! Your task is to critique an existing expedition in <u>Google Expeditions</u>* (or an Expedition-like XR app if for some reason you can't get Google Expeditions to work) in 360/VR/AR:

- 1. Record yourself describing the XR experience using think aloud
- 2. Describe the context of your XR experience (360, VR, AR?)
- 3. Critique the expedition using the I Like/I Wish/What If template
- 4. Analyze the expedition in terms of design guidelines
- 5. Articulate ethical, social, or privacy concerns one might have

Expected results

- Balanced critique of positive/negative design aspects
- Initial ideas for how to change and improve the design
- Better sense of what to look for in terms of design guidelines

Submission

Submit your critique in I Like/I Wish/What If format, a discussion of design guidelines and ethics, and supporting materials (screenshot, photo, high-level sketches) in the XR Design Critiques Gallery:

- I Like/I Wish/What If critique: You should submit a short written design critique following the I Like/I Wish/What If template introduced in lecture. Narrow it down to two important aspects you like, two key issues you wished were different, and two major suggestions for improvement as part of your What If.
- 2. **Design guidelines:** Include a discussion of design guidelines. Referring to the video lectures on design thinking and guidelines, what are principles and guidelines that you think were observed or violated? Can you think of ways of improving them?
- 3. **Design ethics:** Also include a discussion of design ethics. Referring to the video lectures on design ethics, how were the principles of autonomy, transparency, and safety addressed? What are potential issues? What could be done to mitigate those issues?
- 4. **Screenshot/photo:** Include a screenshot or photo that best captures the XR experience you reviewed and any issues you would like to address. There is no need to share the video capture of your think-aloud analysis; it was only meant to support you in this task.
- 5. **High-level sketches:** Ideally, you also include a set of high-level sketches to illustrate how you would change the design. Often a rough sketch of the original interface helps to

^{*} Google Expeditions is available for download on iOS and Android smartphones.

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provide context. Then, illustrate your design changes by highlighting and annotating the corresponding parts of the sketch.

Tips

- **Finding expeditions**: There are quite a few different expeditions you can try out. I did the Solar System for my design critique example. I previously also did the World Cities and Human Anatomy one. Try both AR and VR/360, if you can. For VR, you will need something like Google Cardboard to give you a stereoscopic view. If you can't do VR or AR, resort to 360.
- **Using think aloud**: You should really do this. And, you should do it the first time you try it out. No need to rehearse. Capture the moment you are a first-time user. That's when things are not immediately clear. That's when we find potential design issues.
- Screen capture: You can use your phone and do screen capture for this. iOS has built-in screen capture tools, Android only since version 11. I previously used the free <u>AZ Screen Recorder</u> on Android. Once the video capture has started, try not to change the orientation of the phone. In AZ Screen Recorder you can explicitly set it to landscape/portrait mode, and for best results you should keep the orientation fixed on your phone.
- **Context**: You should mind where you are trying out the experience (environment) and also clearly state which mode you have used (360, VR, or AR?). Please only capture your screen or record video if you're comfortable sharing your exact view.
- I Like/I Wish/What If template: This is a best practice in interaction design oriented courses. Start with a positive. When you go into the critical parts, don't just say what you wished were different, but clearly state how. The What If part is the most important here.