

Technical Features and Skill Points

- **Selection:** 1 skill point (+1 for non-standard methods, i.e., **NOT** ray-casting or virtual hand)
 - Select objects: pill bottle, pulse oximeter, vr goggles
- **Manipulation:** 1 skill point
 - Be able to grab a pill bottle, “pulse oximeter” from the simulated backpack.
 - Highlight compartments of the simulated backpack.
- **Wayfinding:** 1 skill point
- **Travel:** 1 skill point (+1 for non-standard methods, i.e., **NOT** teleport, steering by head/controller direction, etc.)
 - Pull up a map → fast travel to a new VR location, like a forest lake that feels calm.
- **System Control (e.g., menu):** 1 skill point (need to have at least 2 different types of widgets, such as action/toggle button, dial/slider, choice list, sub-menu, etc.)
 - Drop down list of symptoms
- **Symbolic Input (e.g., text or number input) with at least 10 symbols:** 1 skill point (+1 if done with voice recognition - needs to have 80% recognition rate or better)
 - Additional textbox with “please enter additional symptoms seen” plus an area where the user can type their responses.
- **Multi-User:** 2 skill points. Link up two users to collaborate in AR or in VR. Each user needs to be visible for the other user as an avatar (minimum: head and hands). (+2 if multi-user across AR and VR)
- **Hand tracking:** 1 skill point (need to have complicated gesture more than pinching/grabbing)

We may extend this list throughout the duration of the project. We may allow skill points for other things on a case by case basis with prior instructor approval.

The final project has to be presented during our final exam slot. The agenda for presentation day will be:

- 3-4pm: video screening
- 4-6pm: science-fair style demonstrations

Your application grade will be based on your video and your demonstration. It will consist of the following components:

- Technical quality: 60% (10% per skill point)
- Usability: 25%
- Creativity: 15%

Software requirements

Figma prototype for Drug Psychosis:

<https://www.figma.com/proto/pbNXsKzmk6wHAfshxyMnLw/Jeff-Barstow?node-id=956-5236&t=h66ilwd3eeFspAKA-0&scaling=scale-down&page-id=246%3A2&starting-point-node-id=949%3A966&show-proto-sidebar=1>

Slides:

https://docs.google.com/presentation/d/1nhRV1oUpZgYcHy2R2BpxPFXviHJ-kmXs9lI9m4_cMHw/edit?usp=sharing

Forest Map:

- <https://assetstore.unity.com/packages/3d/environments/low-poly-vegetation-kit-lite-176906>

Backpack model:

<https://assetstore.unity.com/packages/3d/props/clothing/accessories/military-camo-bag-62496>

Task:

- ☐ Get AR origin down
- ☐ Scanning ui
- ☐ Dropdown ui
- ☐ Simulate backpack in AR scene
 - ☐ Arrow pointing to backpack (wayfinding)
 - ☐ Make backpack compartments and spawn points for
 - ☐ Pills
 - ☐ pulse oximeter
 - ☐ Headset
 - ☐ Spawn objects if the user selects them
- ☐ Forest Scene
- ☐ Make forest map
- ☐ Teleport to different forest places

backpack scene

- backpack + unconscious body

- scan body

- scan output: psychosis

 - buttons to input symptoms

 - submit symptoms (just print out symptoms)

- put oximeter on body

- put pills on body (?)

- put vr headset on body (last -> transition to forest scene)

forest scene

- breathe in/breathe out text

- pull up big map with buttons

- teleport to locations

- end?