

Agenda for X3D WG Call 7 Feb 2020

On Zoom: <https://zoom.us/j/148206572>

Resources:

Pre-meeting x3d-public postings:

FreeWrl : http://web3d.org/pipermail/x3d-public_web3d.org/2020-February/011774.html

V 3.3 Spec:

Navigation Paradigms:

<https://www.web3d.org/documents/specifications/19775-1/V3.3/Part01/components/navigation.html#NavigationParadigms>

NavigationInfo node, with descriptions of modes:

<https://www.web3d.org/documents/specifications/19775-1/V3.3/Part01/components/navigation.html#NavigationInfo>

X3DOM Turntable: https://www.x3dom.org/x3dom/example/x3dom_turntable.html
<https://doc.x3dom.org/tutorials/animationInteraction/navigation/index.html>

Preliminary outline

1. Current 'standard' navigation methods, how do implementations differ?
2. Current extensions, for example the TURNTABLE. Can they be put in spec?
3. What methods are usable for environments not mouse-driven , for example haptic devices; and mobile touchscreens,
4. Is it possible to define an interface or a programming paradigm for implementing custom navigation methods (e.g. by scripting)? - example: custom gravity

May I suggest a few ideas, although I don't know whether they're new, although I will not be able to contribute to their realization?

- 1) One should be able to implement custom navigation methods, e.g. by scripting

Can this be done by acting on the position_changes, orientation_changed events of the ProximitySensor?

<https://www.web3d.org/documents/specifications/19775-1/V3.3/Part01/components/envsensor.html#ProximitySensor>

- 2) one should be able to introduce a navigation method (or methods) as an integral part(s) of an avatar

- 3) what is an avatar: an avatar consists of one or more dynamic models that represent a virtual identity

- 4) a dynamic model is a model that can be loaded or unloaded on demand during the lifetime of a multiuser session

5) one virtual identity can be related to one or more real identities (users). In the latter case the virtual identity is called a "crew"

4a. Can a custom navigation method be interpreted as a property of an avatar? E.g. Two users form a "crew" and operate a "locomotive", where the locomotive is an avatar that "represents" the crew