

**Model Editor for Digital Signage**  
**Feb. 12 (Monday) 11:00-11:50am**  
**MUS 206**

Attendees:

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Zachariah Valenzuela, Business Analyst, [ZValenzuela@mtech.edu](mailto:ZValenzuela@mtech.edu)

11:00 Review of last meeting

Zachariah Valenzuela

The group agreed that the name, two business objectives and vision from the notes of the last meeting looked ok. They also agreed that the editor would likely be used with differing goals:

- Tailor a display toward leading a viewer
- Tailor a display toward allowing a visitor to explore

The second business goal states:

- Starting from pre-existing digital videos, make it possible for a new user, with the help of a guide, to create interactive digital signage for an exhibit within 3 hours, and subsequently to make simple changes to the signage within 10 minutes.

The “guide” they felt could be a person who is familiar with the DSME. They did not see a need for a user manual.

11:10 Scope/environment of DSME

Zachariah Valenzuela

- Platform neutral
- Implication of database
- DSME connected vs disconnected

Elements the DSME will communicate with:

- Exhibit developer (the person using the DSME)
- JSON file being developed by the DSME
- CE Library – see discussion below
- Assets – see below
- Signage renderer – see below
- Analytics – see below

CE Library: In both the connected and unconnected states, the DSME will communicate with a CE library. It is assumed that models within the DSME will be graphical. Nodes within a graphical model will be referred to as a “Content Element” or CE. A CE element can be used in multiple exhibits.

A CE might have multiple assets (e.g. video, title, subtitles, images, animations, audio, etc.) associated with it. For example, a CE may consist of a video clip, along with a title. By having the title asset separated from the video clip asset, the video clip asset is usable for different purposes. One CE can be a video with a title. Another CE can be the same video with a different title, and possibly audio.

It was decided to maintain a library of CE elements outside the DSME. In some cases, the CE will be stored in the library, at other times only a pointer to the CE need be stored.

Question:

- Can an asset be associated with more than one CE?

Assets: The DSME needs to provide access to all of the assets in the signage portion of an exhibit. The assets themselves will not be in the DSME, nor in the JSON file. Assets are associated with CE elements. They, or pointers to them, will be in the CE library.

Assets will need to be versioned.

Signage renderer: The DSME may communicate with a signage-renderer. This can be the display renderer. Alternatively, it can be a “mini-render” that allows an exhibit developer to view how a model would be displayed. The mini-renderer could be used in the disconnected state or in the connected state when an exhibit is under development.

Analytics: The DSME may communicate with an analytics system that accumulates usage and path tracking statistics from a display signage renderer.

11:25 Users

- Exhibit developers
- Domain Knowledge
- Knowledge of computer file systems

Michael Fryer

The only users of DSME will be “exhibit developers”.

The skills of “exhibit developers” include:

- Domain expertise and knowledge structure, e.g. the ability to identify relationships amongst the assets of a topic.
- Creating, obtaining and managing assets in external or local storage.

11:30 Features

- Create/read/update/delete (CRUD) functions for:

Michael Fryer

Exhibits  
Videos  
Attributes  
Relations

DSME features:

- Push and Pull a CE from the CE Library
- Facilitate searching the CE Library
- ‘Add existing CE To’, ‘Add new CE To’, ‘Edit CE, saving changes to library’, ‘Edit CE, creating new CE in library’ and ‘Delete CE From a signage model’, ‘Delete CE From Library’.
- Create, Edit, List and Delete an attributes of a CEs
- Create, Edit, List and Delete a relations between two CEs
- Create, Edit, Update, Save-As and Delete a signage model
- Provide access to all assets in a signage model
- Display limited changes made in a signage model (the signage model will not contain a complete signage renderer)
- Publish signage model, by bundling necessary assets with the JSON file, enabling a signage renderer to render the model. In the disconnected state, all assets will need to be bundled with the JSON file. In the connected state, the signage renderer may be able to acquire some assets on its own.
- Ingest display data from data analytics server
- Be able to recommend content

Notice that the DSME will not facilitate creating assets.

11:50 Next Meeting, Define use cases, February 26<sup>th</sup>

Zachariah Valenzuela