

**Model Editor for Digital Signage**  
**Jan. 29 (Monday) 11:00-11:50am**  
**MUS 206**

Attendees:

Phil Curtis, Science Mine, [PCurtis@mtech.edu](mailto:PCurtis@mtech.edu)  
Michael Fryer, Business Analyst, [MFryer@mtech.edu](mailto:MFryer@mtech.edu)  
Loch Gordon, World Mining Museum, Curator,  
[curator.worldmuseumofmining@gmail.com](mailto:curator.worldmuseumofmining@gmail.com)  
Fred Hartline, Science Mine, [fred.hartline@earthlink.net](mailto:fred.hartline@earthlink.net)  
Jeanette Kopf, World Mining Museum, Director, [wmmdirect@gmail.com](mailto:wmmdirect@gmail.com)  
Celia Schahczenski, Manager, [CSchahczenski@mtech.edu](mailto:CSchahczenski@mtech.edu)  
Zachariah Valenzuela, Business Analyst, [ZValenzuela@mtech.edu](mailto:ZValenzuela@mtech.edu)

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|-------|--|--------------------|
| 11:00 | Introductions  | Celia Schahczenski |
| 11:05 | Requirements Engineering Process <ul style="list-style-type: none"><li>• What is meant by requirements and why we develop them</li><li>• Needed from this meeting</li><li>• Requests</li></ul> | Celia Schahczenski |
| 11:10 | Science Mine Signage System <ul style="list-style-type: none"><li>• Current system architecture</li><li>• JSON example, what we are trying to avoid</li><li>• Existing editor</li></ul>        | Michael Fryer      |

When developing the current system, they used the uniform input strategy so that the editor would work with all human interface devices (HID) such as keyboards, mouse, etc. They currently have 3 input devices: button box, touch screen and a laptop.

They had two issues with signage:

1. Decide what to show next
2. See how people viewed the videos, where did they go

The current model consists of nodes (videos) and relations between nodes, where each relation has 3 parts:

1. Related video
2. Relative difficulty as a weight, +/- integer
3. Semantic tag describing the relation

The editor allows these to be added or removed. Currently to adjust a weight, the relation is removed and re-added with the new values.

The Science Mine wants digital signage to encourage exploration, “learning through discovery”. They don’t want to make decisions for the end user, prescribing where to go. They do want to record where the user goes.

The World Mining Museum (WMM) wants to direct the user more. They describe processes, so want to encourage an order of viewing. They are also very interested in tracking. For instance, they want to learn what kids like.

The editor will likely be used with differing goals:

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

Users would like to be able to tailor the digital signage portion of exhibits based on traffic flow data.

#### 11:35 Business Objectives

Michael Fryer

Ideas for the business objectives are:

- Make it efficient to create and modify digital exhibit signage, increasing signage effectiveness and encouraging visitors' return visits.
- 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.

#### 11:40 Vision and Editor Name

Zachariah Valenzuela

Editor Name: Digital Signage Model Editor (DSME)

Vision statement:

The DSME is a graphical editing tool for exhibit developers who are interested in building effective, interactive digital signage for exhibits, helping the developer visualize how concepts work together by focusing on the knowledge of the exhibit. The system creates portable and reusable JSON files used by the signage system to highly tailor the signage to the needs and concepts related to individual exhibits.

#### 11:50 Next Meeting, Define scope, environment, features, users, Feb. 12<sup>th</sup>,

Celia Schahczenski