MASH A Concept Map InfoViz Tool

Introduction

Digital archives preserve data in the form of text, photos, videos, files, or a combination of these. The archives are capable of retaining knowledge, but, their ability to create relationships or illustrations with its information for further study is limited. Other tools exist, but they are not domain-specific and need a greater level of expertise to use.

Aim

The purpose of this study is to evaluate an experimental concept mapping tool that allows users to create, edit, and visualize digital content and the relationships among them using concept maps. MASH is a web application with two main components: Complex Object Creator and Editor (COCE) and Complex Object Mappings Renderer (COMR).

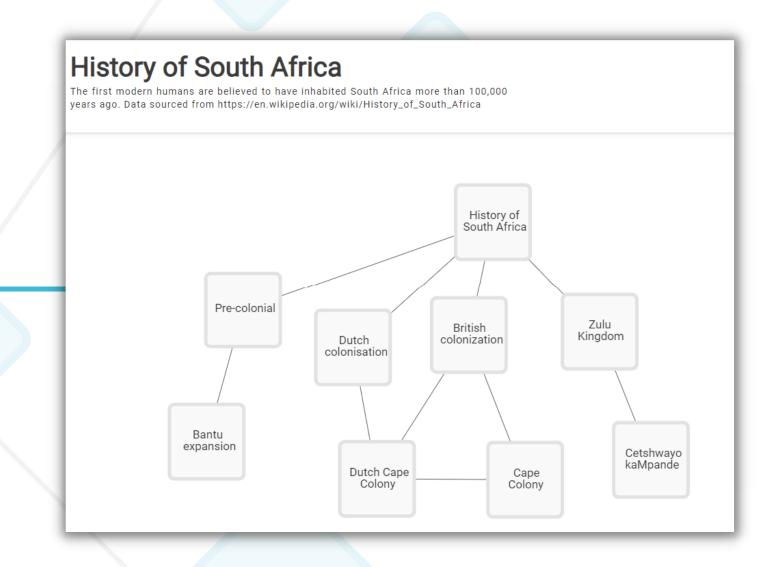
MASH Experimental System

COCE

COCE handles the creation and editing of concept maps. It offers digital object creation and concept mapping of these digital objects referred to as nodes.

COMR

COMR handles concept map visualization. It provides interactivity by allowing users to view informational web pages by clicking on concept map nodes and searching through nodes.



Concept Map Creator Map Name: History of South Africa Map Description: (max 300 characters) The first modern humans are believed to have inhabited South Africa more than 100,000 years ago. Data sourced from https://en.wikipedia.org/wiki/History_of_South_Africa Map: Add Node Title: Enter title for element Short Description: (max 300 characters) Details: Paragraph B I 0 := ;= 66

Evaluation Process

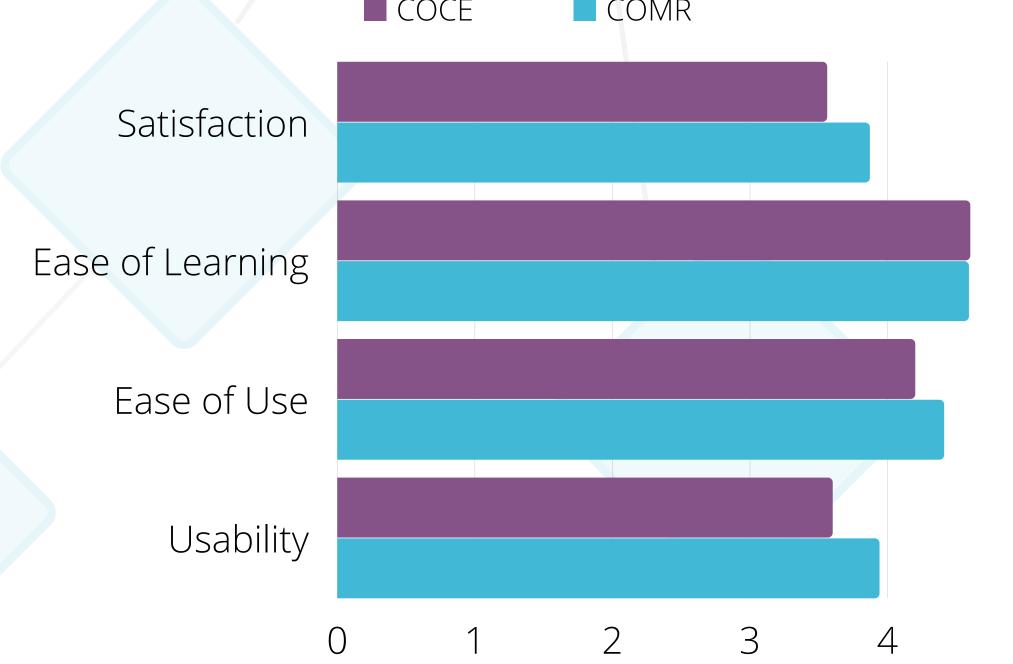
- 25 participants, with varying academic backgrounds, were given a list of tasks to complete, and then rated their usability of MASH using a standardized questionnaire.
- The questionnaire evaluated the usability of MASH in Usefulness (U), Ease of Use (EU), Ease of Learning (EL) and Satisfaction (S), as well as their most favoured and least favoured features.

Results and Conclusion

All usability categories received at least a 3.5 rating. Evaluators praised the features' simplicity and their ability to grasp how to complete tasks. MASH's design was simple enough for users to complete required tasks easily. But, it also reduced user engagement and enthusiasm, resulting in satisfaction ratings below 4. MASH appears to be promising and users find it interesting. With some advanced enhancement, it can become a specialized concept mapping tool.

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USE Questionnaire Results COCE COMR





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