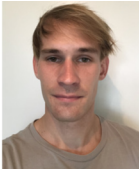# Team Avatar Visualization, Emotion Analysis, and Gamification

Enhancing Team Dynamics and Emotional Well-being through Gamification and Emotional Awareness

Graduate

Florian Blum

Introduction: A research project conducted by the Institute of Informatics (I3) and the Department of Information and Process Management (IPM) at the University of Applied Sciences OST, in collaboration with the VEBO Genossenschaft, aims to develop an application tailored to the needs of VEBO Genossenschaft. The project's goal is to enhance team dynamics and emotional well-being through the use of gamification and emotional awareness within a sheltered workshop. To assess the application's effectiveness and usability, testing in a real-world scenario is required.

Approach: This thesis adopts a user-centered design approach to develop a web application that visualizes team dynamics and emotions in real time. By incorporating gamification elements, the application seeks to increase user engagement and motivation. A comprehensive scientific literature review on gamification elements and sheltered workshops is conducted to identify relevant concepts. The application is subsequently evaluated in a field study with VEBO employees to assess its usability and effectiveness.

Result: The outcomes of the project include new application features such as a team dynamics visualization tool and an emotion analysis module. The usability tests indicate that the application is well-received by users and functional in a real-world context. However, scientific research findings remain limited due to the lack of comparable applications in the domain of sheltered workshops and gamification. Despite this, the project identifies promising features and concepts that can serve as a foundation for further research and development in future studies.
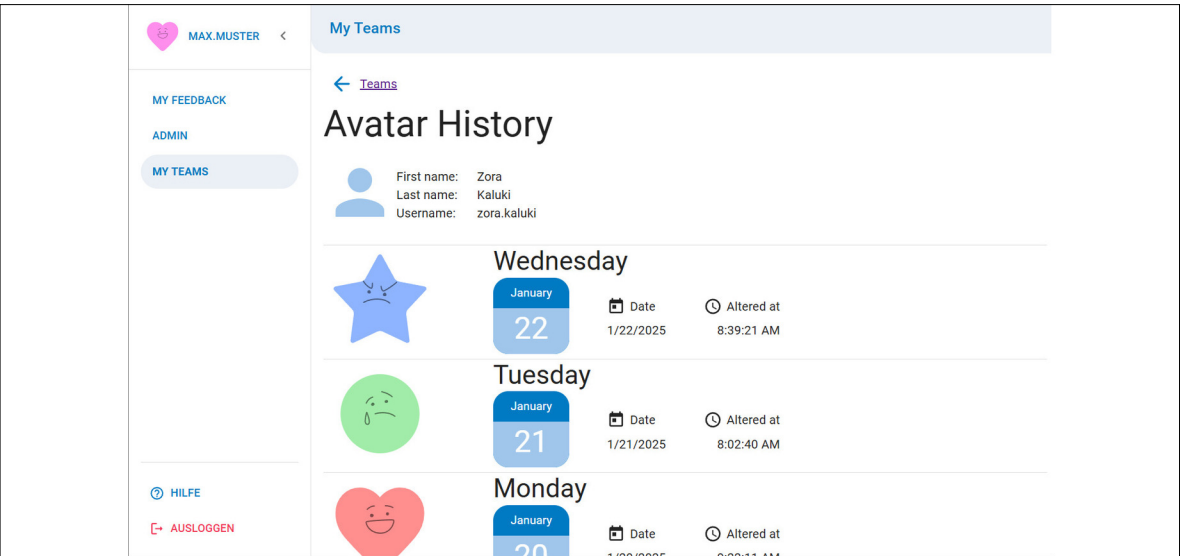

Figma prototype of the team view
I3 Institute for Interactive Informatics
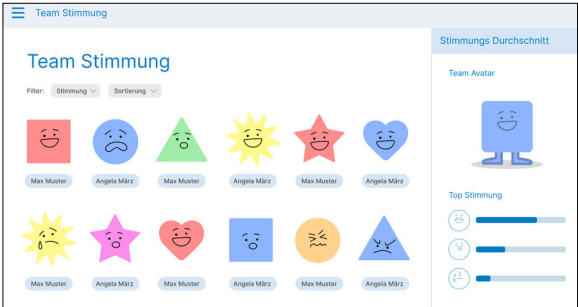
Implementation of the team view
Own presentment
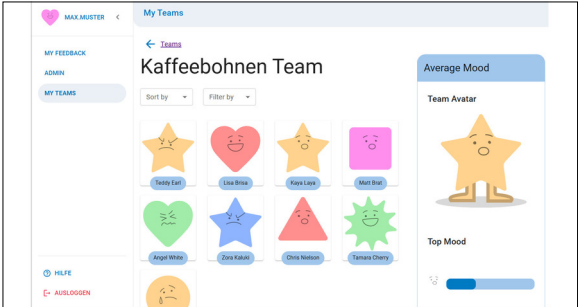
Implementation of the user avatar history
Own presentment

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