

Personal Informatics for Capturing Emotions

Increasing Self-Knowledge and Reflection at Work

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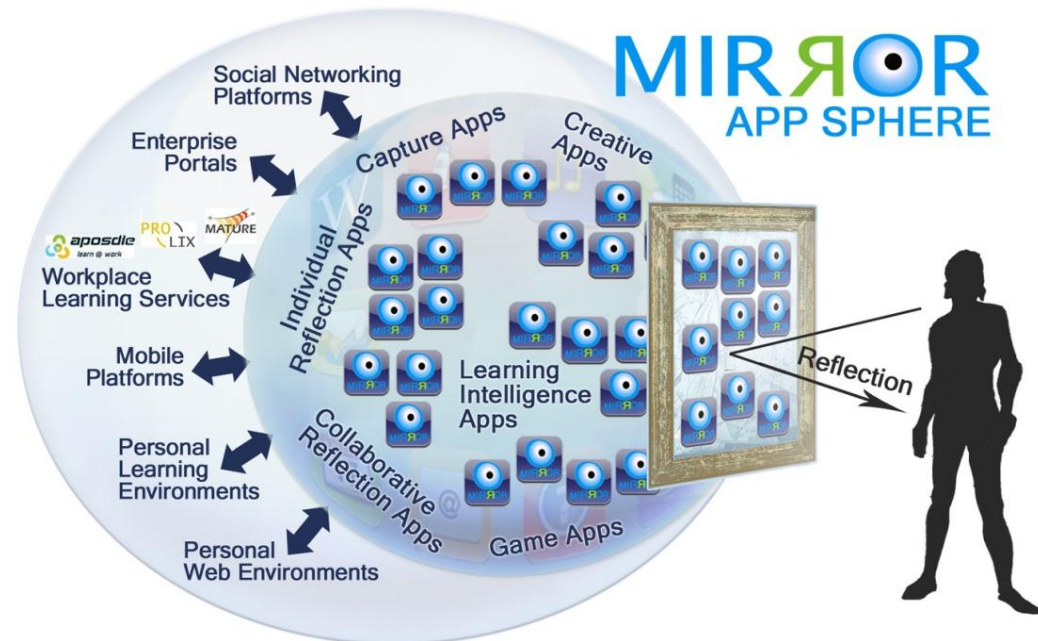
- Introduction: MIRROR, Reflective Learning at Work
- Motivation
- Reflective Learning
- Personal Informatics and Quantified Self
- Capturing Emotions
- Scenarios and Prototypes
- Conclusions and Outlook



MIRROR

Reflective Learning at Work

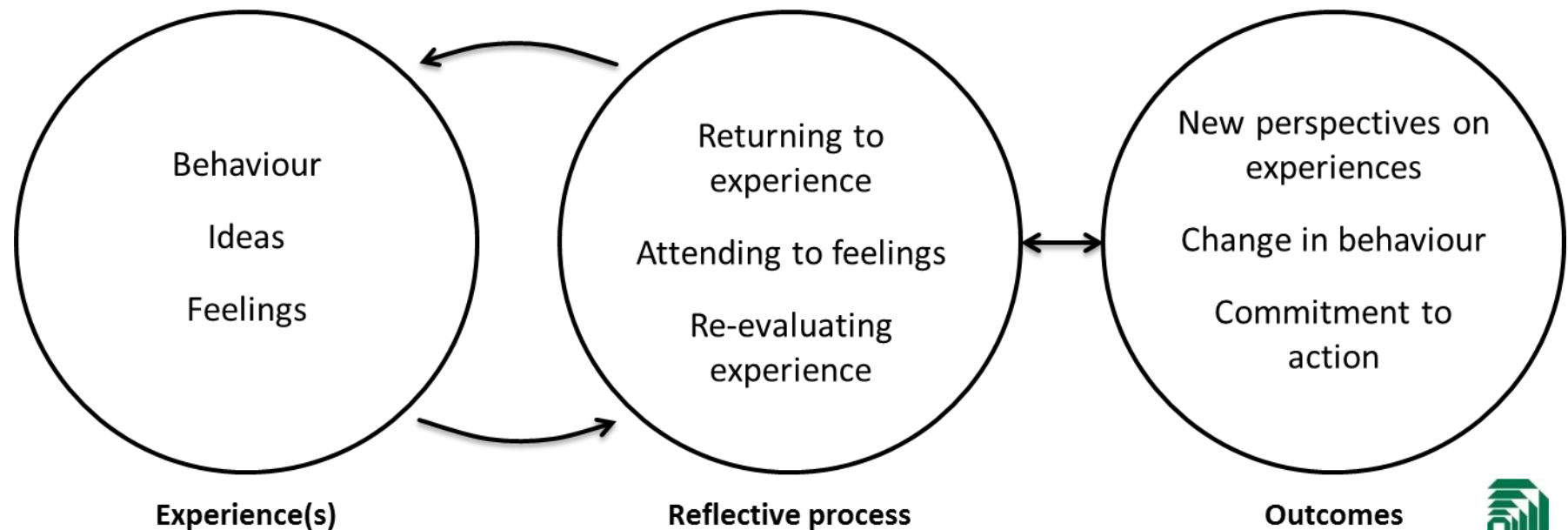
- Support learning-on-the-job and experience sharing
- Learning by reflection on observed practices and collected data
- Focus on acquisition of tacit knowledge



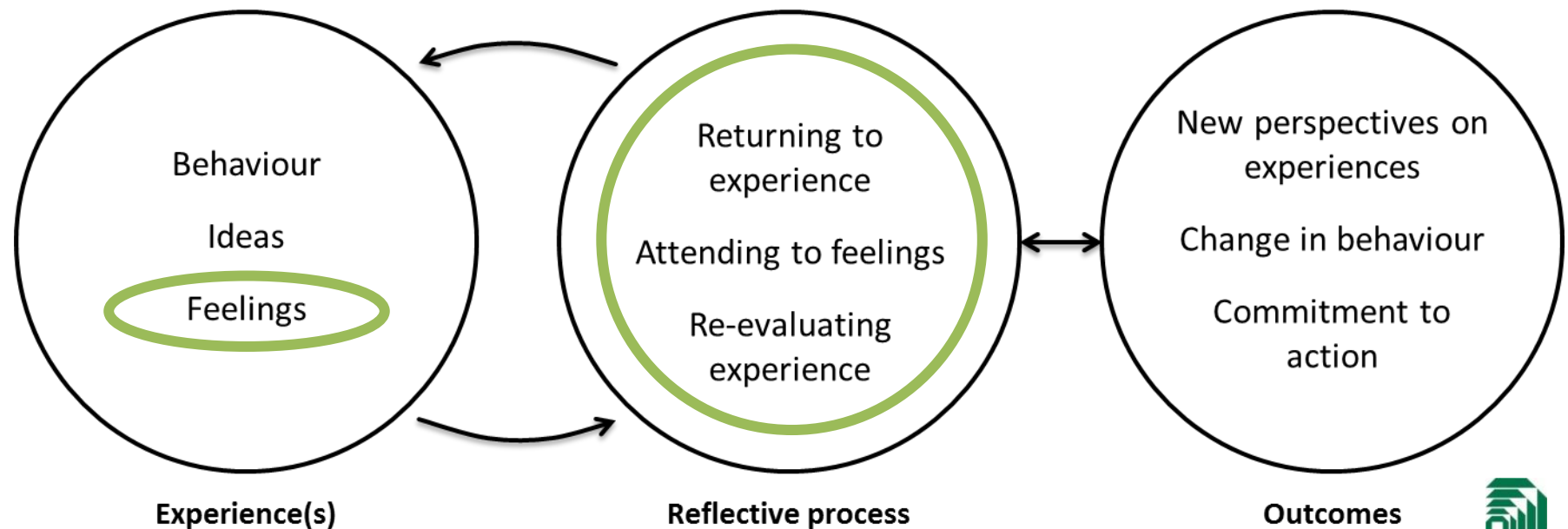
Quantified-Self
Learning-by-Reflection Data
User-studies
Experience-representation
Human-Computer-Interaction TEL
Applications
Capturing-Learning-Experiences Mobile
Reflective-Learning-at-Work
Work Interpretation
Awareness
Technology-Supported-Learning-at-Work
Mood Self-knowledge-through-Self-Tracking
Devices Mobile-Applications
Self-knowledge-through-numbers Reflection
Context-Infrastructure
Emotions
Informal-Learning
Aggregation
Context-Management Enterprise
Mood-Awareness Capturing
Sensors



- Boud et al. 1985
- ``those **intellectual and affective activities** in which individuals engage to explore their **experiences** in order to lead to **new understandings** and appreciations''



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- **Quantified Self (QS)**
 - Collaboration of users and tool makers
 - **Self-knowledge** through self-tracking
 - Tools to collect personally relevant information
 - **Self-reflection** and self-monitoring
 - Gaining **self-knowledge** about one's experiences, behaviors, habits and thoughts





Sleep Cycle

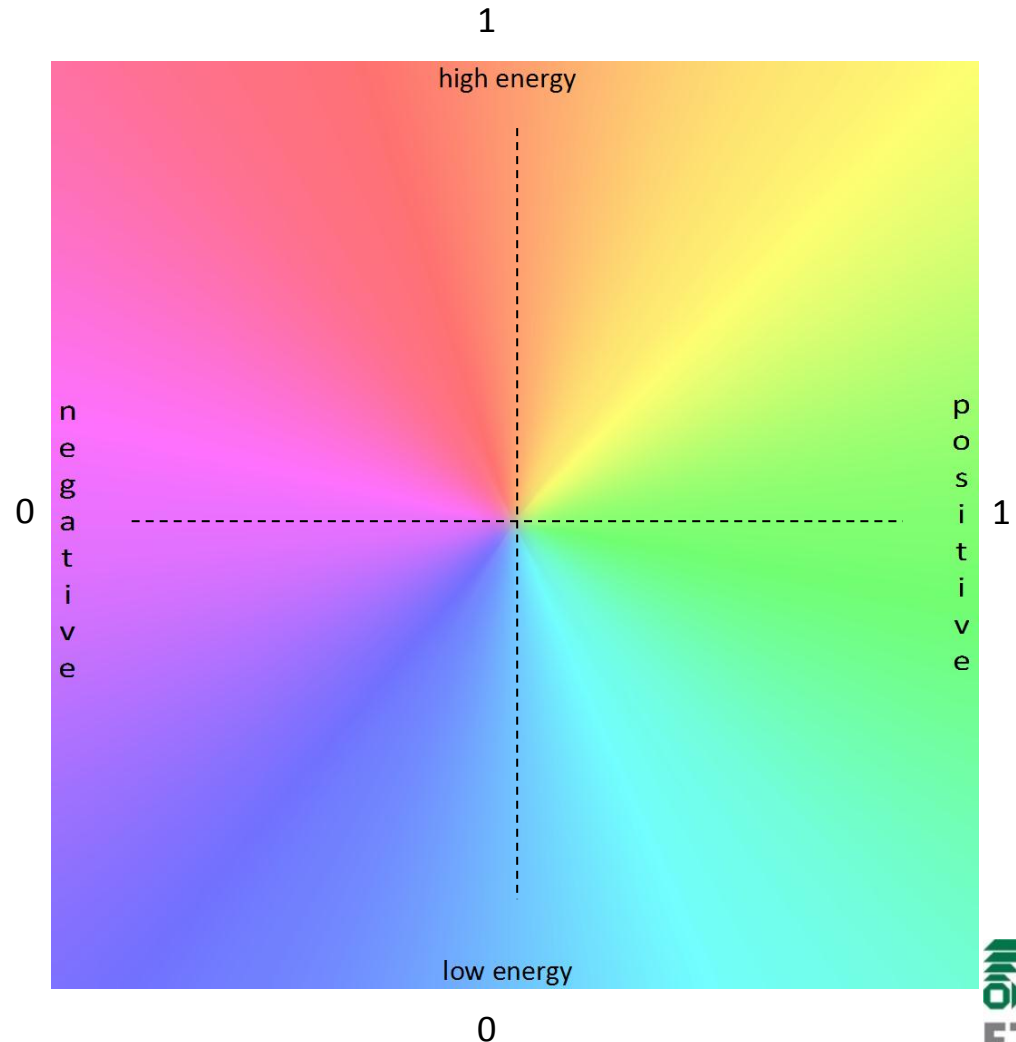
- Tracking data
- Recalling experiences and revisiting data
- Sharing data

- Individual's state of mind
- No definitive taxonomy
- Quantify abstract states
- Suitable for capturing with devices or mobile applications



- How can we represent Emotions?

- A Circumplex Model of Affect
(Russell, 1980)
 - Mood = (valence, arousal)



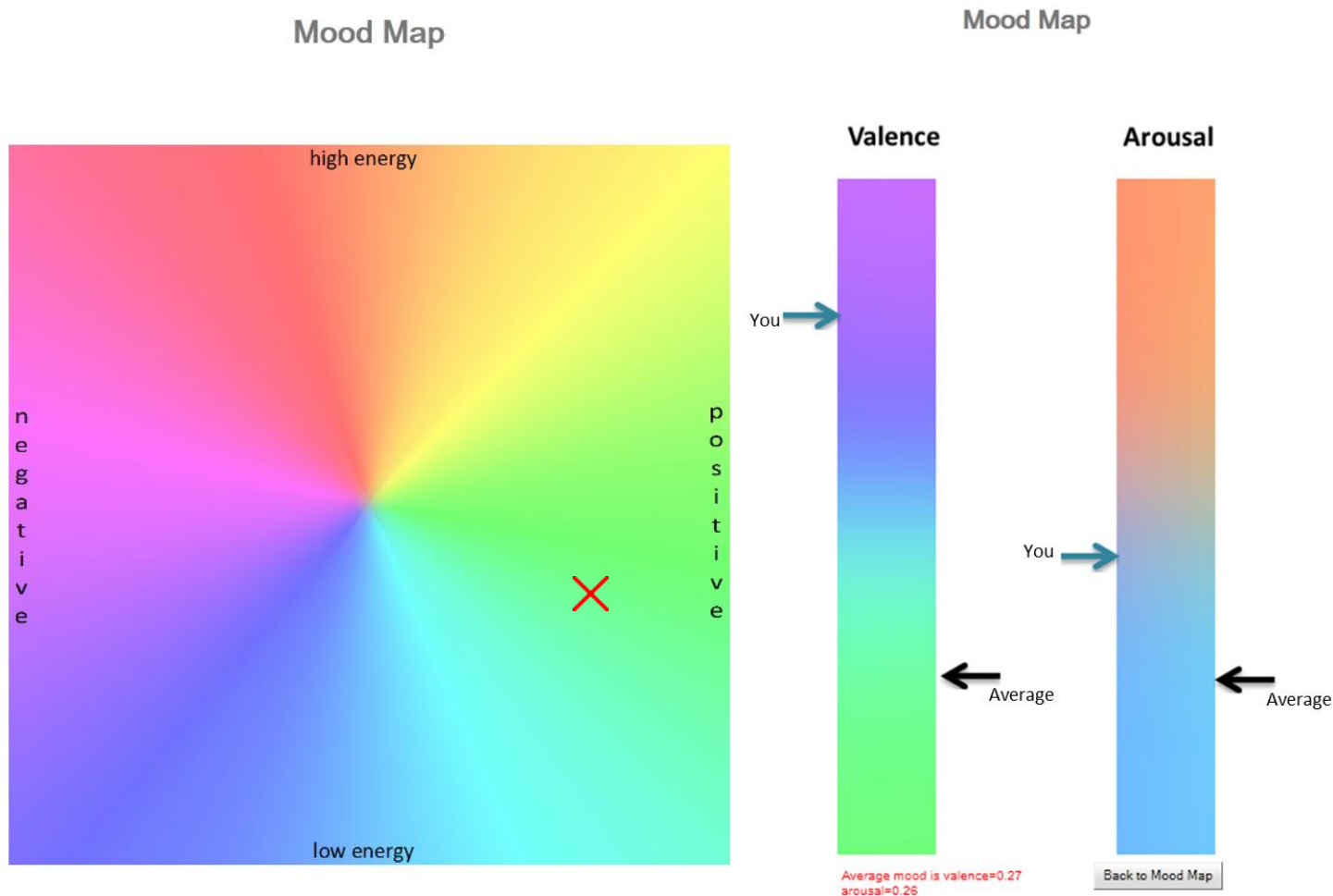
- Support for:
 - (I) Collaborative Settings
 - (II) Virtual Team Meetings



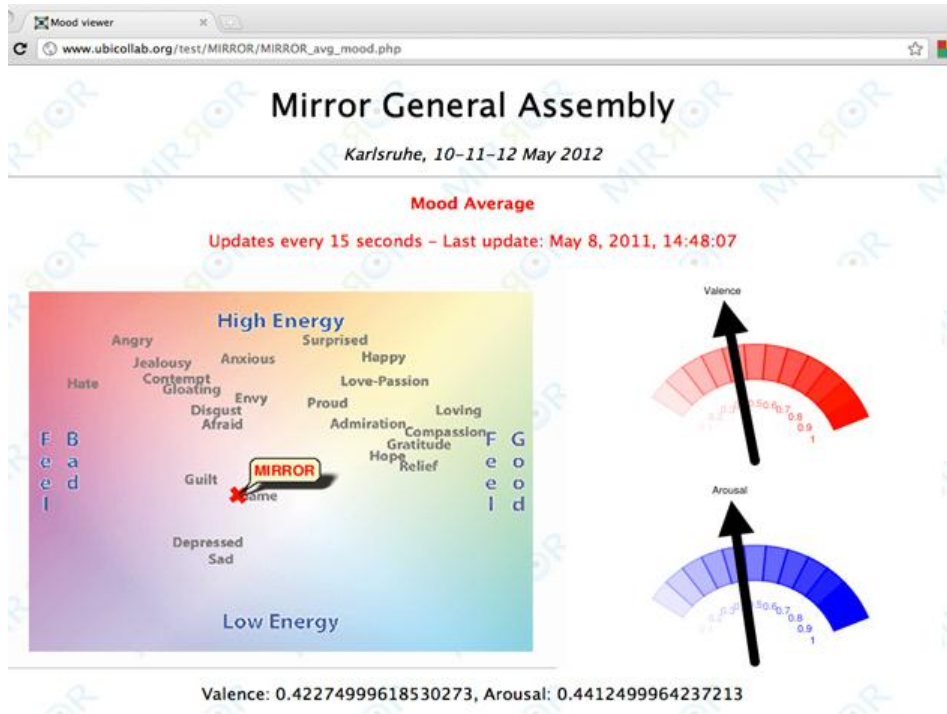
- 3 day project meeting
- Project critical issues
- Discussion and presentations

- Capturing subjective mood
- Aggregate anonymous mood data
- Provide feedback

- Multiple visualizations and tools in the same scenario



(I) Collaborative Settings: Project Meeting

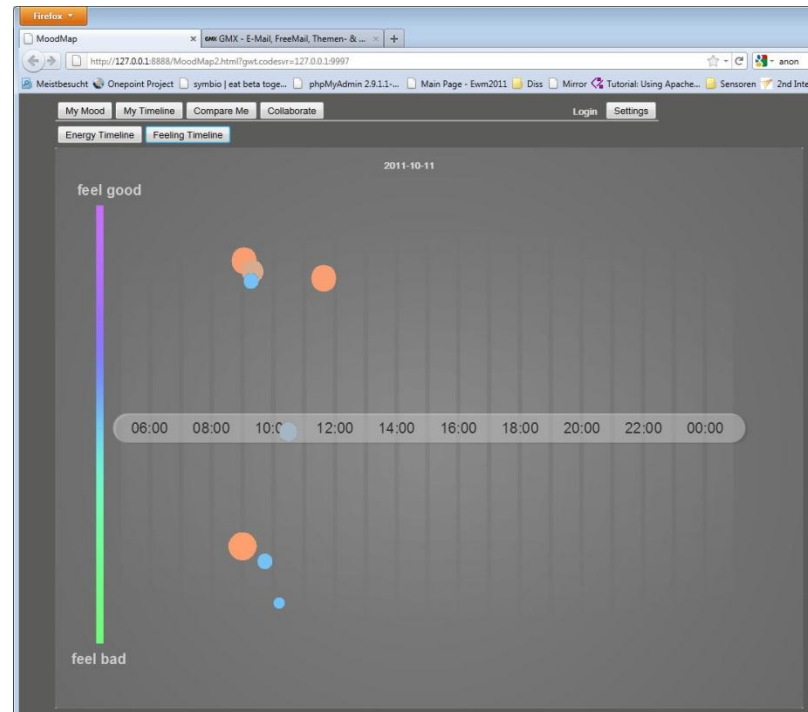
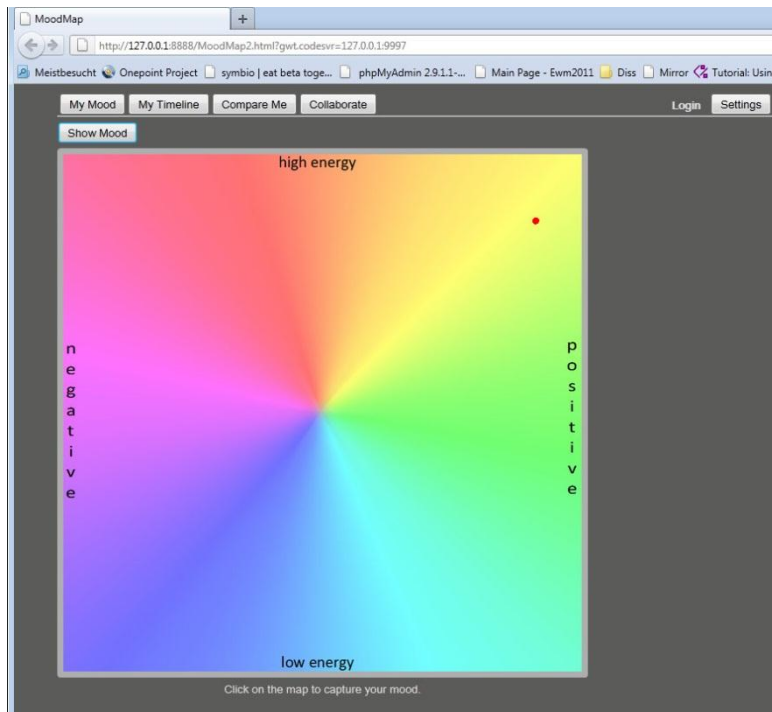


- Multiple visualizations
- More than 1000 entries from 30 participants
- Positive feedback
- Very different usage patterns

- A team meets weekly in a conference call
- Although very effective, we lack the non-verbal communication
- Enrich our experience for latter reflection
- Reflect and learn from our own observation and from others



- Prototype Development
 - Live and History Analysis
 - User and Group Management



- Improve **self-knowledge**
- Support **personal** and **team emotional-awareness**
- User willingness: different **motivations**
- Team and organizational **benefits**

- Indicators that prove the (learning) benefits
- Evaluation of prototypes in several scenarios
- Interaction and Exchange between Apps or Sensors
- Enrichment of the data: to other datasets
- Privacy concerns

Thanks for your attention!

Any questions?