eMotion OVERVIEW

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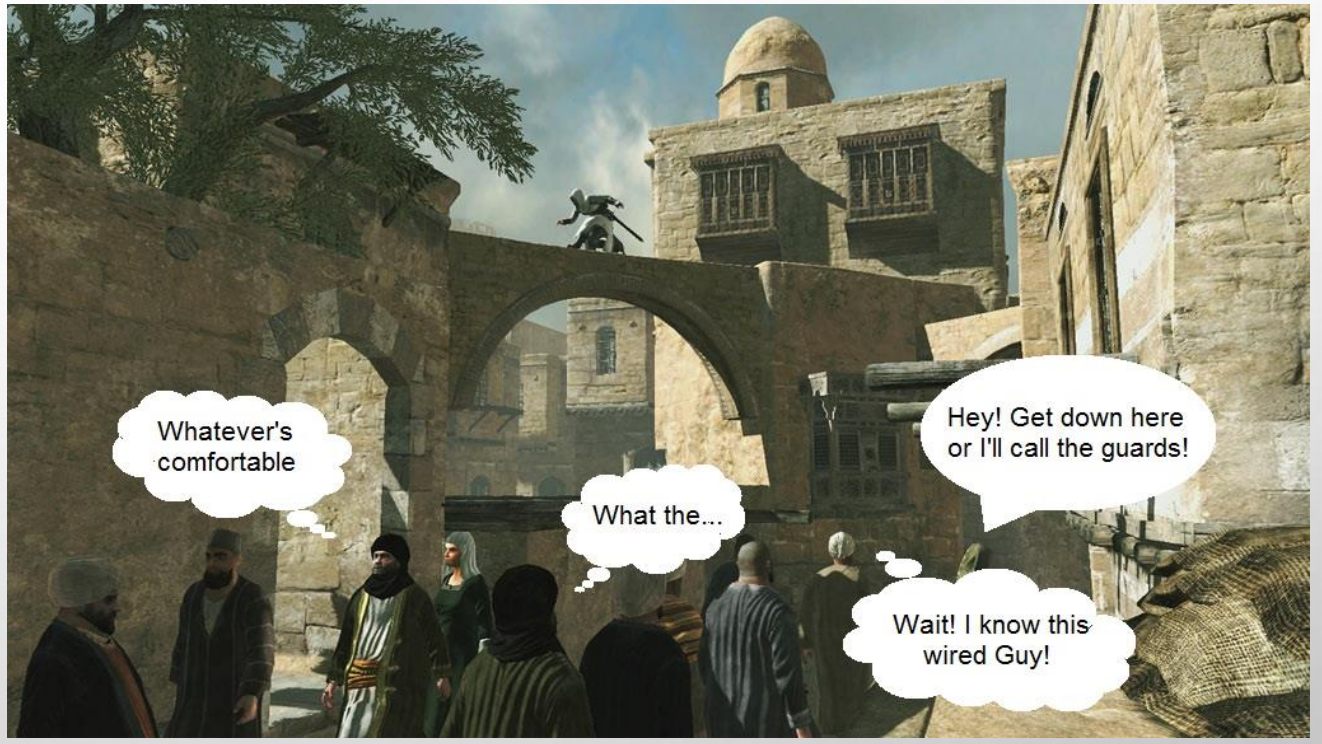
01.03.2014

WHAT IT IS

- eMotion ENABLES YOU TO ATTACH EMOTIONAL BEHAVIOR TO AN ALREADY EXISTING A.I.
- eMotion ALLOWS TO CREATE DYNAMIC AND INDIVIDUAL ASPECTS IN GAMES
- eMotion CAN BE USED AS A BLACK BOX
- eMotion WORKS WITH RELATIONS, NOT WITH DEFINITIONS. YOU CAN INTERPRET AND IMPLEMENT EMOTIONAL BEHAVIOR IN THE WAY YOU WANT IT.
- eMotion IS DESIGNED TO BE USED IN GAMES, SO IT SHOULD BE FAST ENOUGH

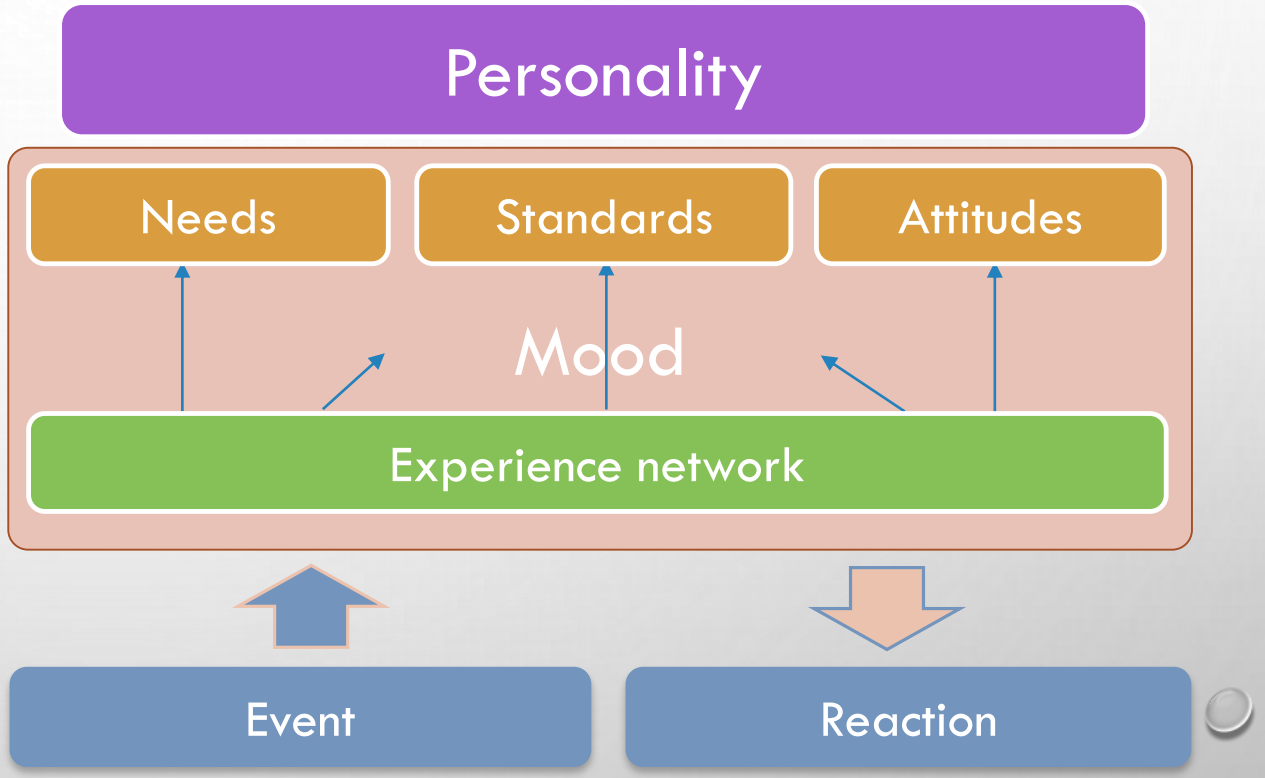


eMotion
THE CONCEPT

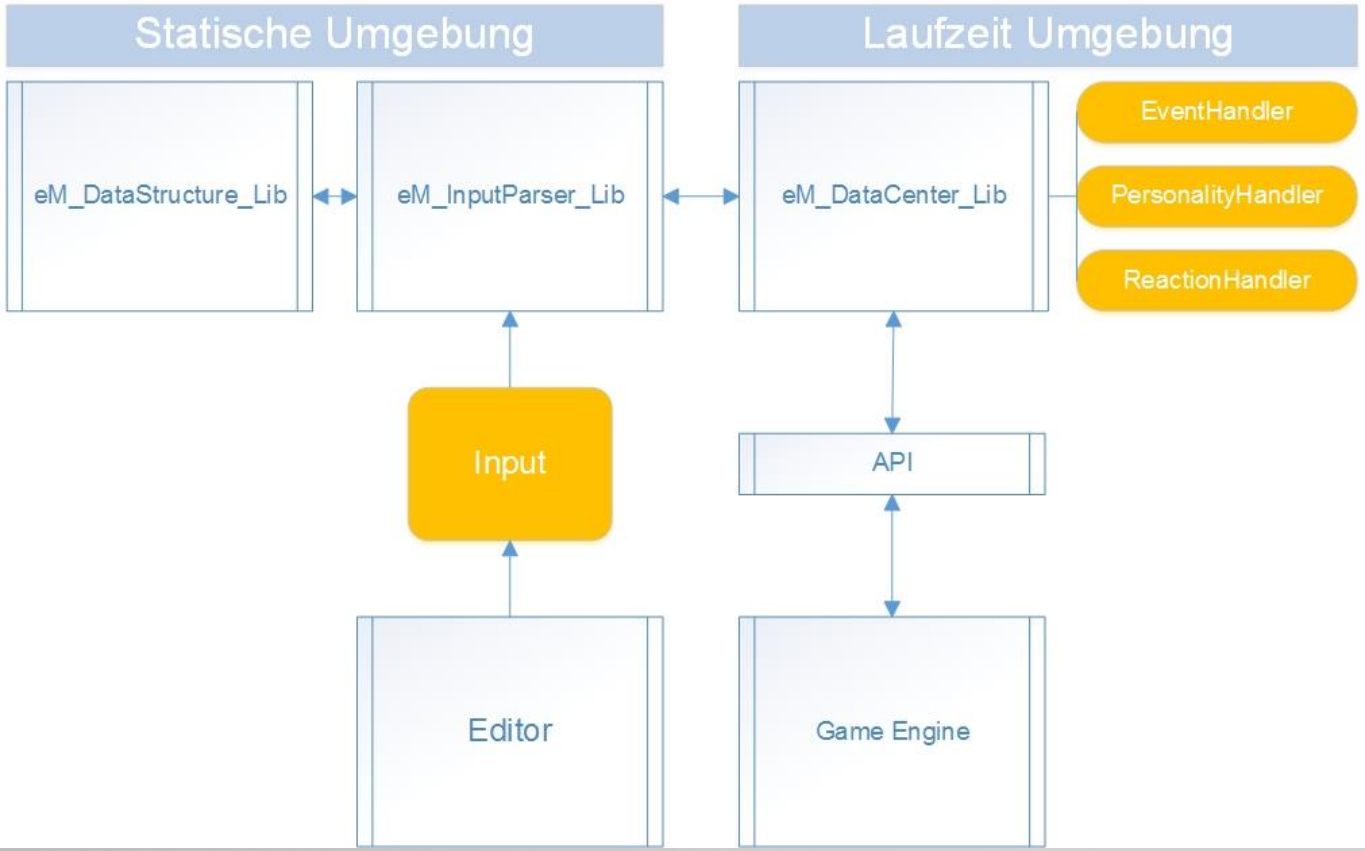
- **ABSTRACT,** TO DECOUPLE FROM CONCRETE DEFINITIONS.
- **MODULAR,** TO ALLOW MANY DIFFERENT IMPLEMENTATIONS.
- **FEW RESTRICTIONS,** TO ALLOW MANY DIFFERENT INTERPRETATIONS

eMotion
THE CONCEPT

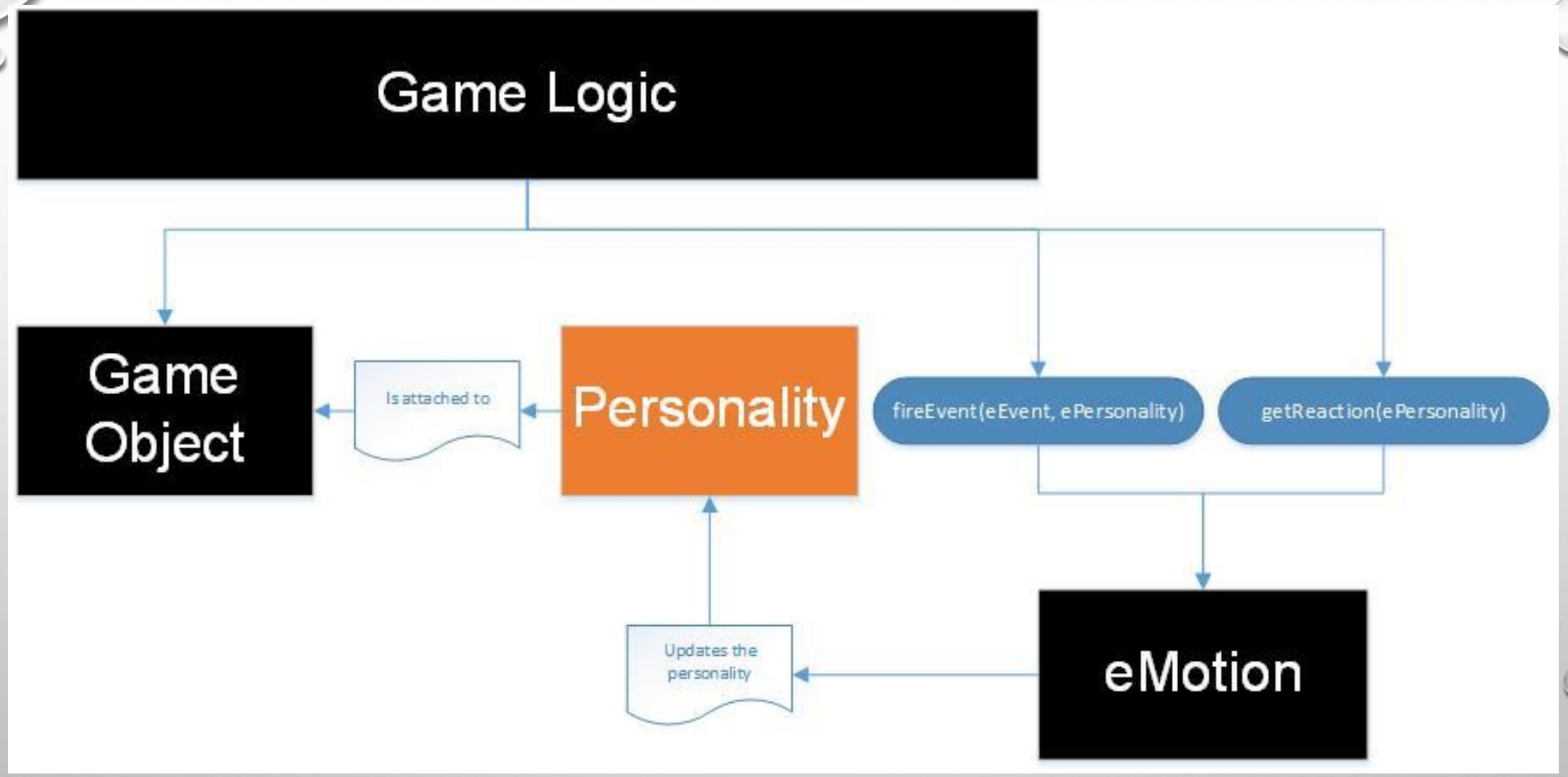
- **A PERSONALITY** IS DEFINED BY *NEEDS*, *STANDARDS* AND *ATTITUDES*.
- *THE EXPERIENCE NETWORK* ALLOWS THE **PERSONALITY** TO LEARN.
- THE *MOOD* DESCRIBES THE ACTUAL STATE OF THE **PERSONALITY** AND SERVES AS BASE FOR THE CALCULATION OF *REACTIONS*.



eMotion
THE IMPLEMENTATION



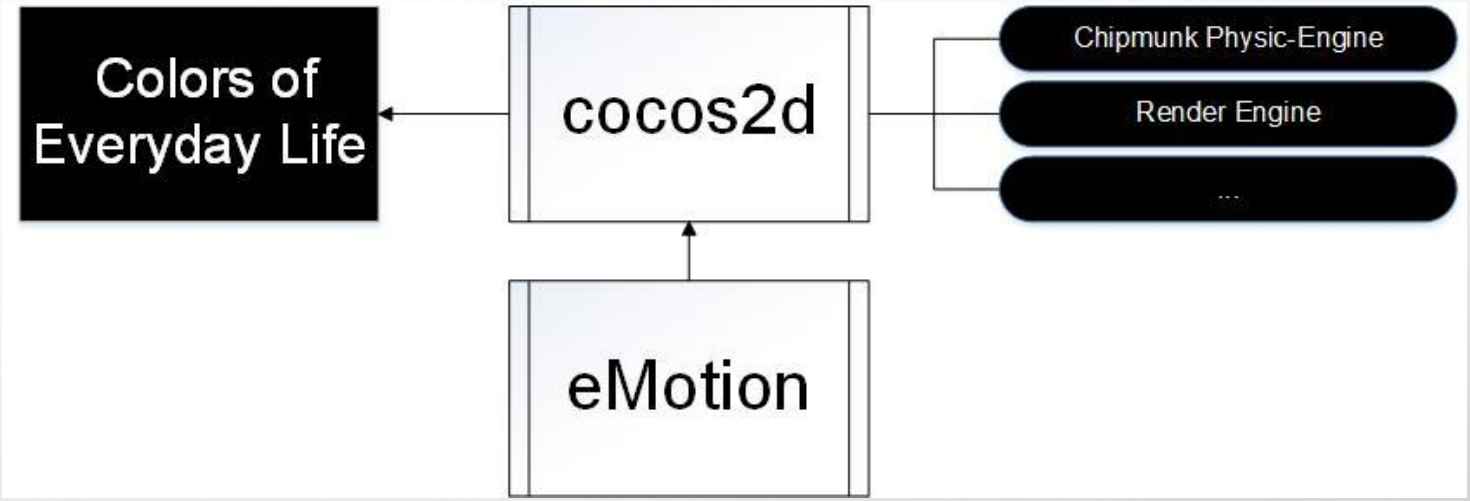
- WAS BUILT IN C++, TO ACHIEVE CONTROL OVER **MEMORY MANAGEMENT** AND **PERFORMANCE.**
- USES A **DATACENTER** TO MANAGE *PERSONALITIES, EVENTS* AND *REACTIONS.*


Game Logic
Game Object
Is attached to
Personality
fireEvent(eEvent, ePersonality)
getReaction(ePersonality)
Updates the personality
eMotion

DEMO

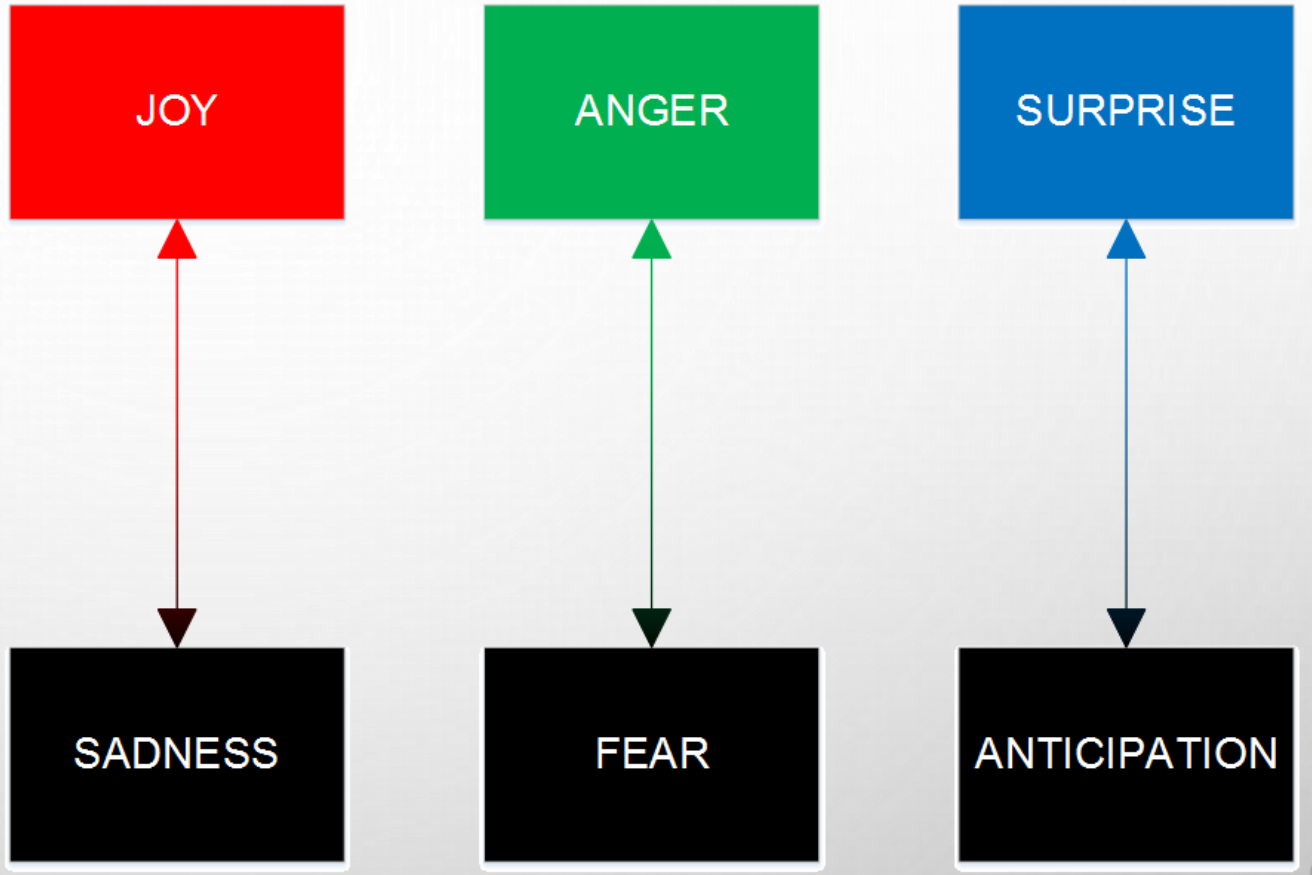
COLORS OF EVERYDAY LIFE

- VISUAL DEMO
- USING COCOS2D, AN OPEN SOURCE 2D MULTIPLATFORM GAME ENGINE



COLORS OF EVERYDAY LIFE

- USING RGB-CHANNELS TO MAP FEELINGS
- PLUTCHIKS „WHEEL OF EMOTIONS“ SERVED AS ORIENTATION



COLORS OF EVERYDAY LIFE

- AKTEURS: EXPERIENCE DESCRIPTION
- OBJECTS: SURPRISE VALENCE

```
:feelings
Joy_Sadness;Anger_Fear;Surprise_Anticipation;
1.0
0.0

:akteurs
pleasent;nice;disgusting;exiting;sad;wonderful;adventourus;danger
ous;memorable;gruel;ugly;

:objects
very_unexpected;unexpected;little_unexpected;neutral;little_antic
ipated;anticipated;very_anticipated;

#attitudes: template (name:indeces,of,feelings:index of akteur;)
:attitudes
pleasent_att:0,1:0;nice_att:0,1:1;disgusting_att:0,1:2;exiting_at
t:0,1:3;sad_att:0,1:4;woderful_att:0,1:5;adventourus_att:0,1:6;da
ngerous_att:0,1:7;memorable_att:0,1:8;gruel_att:0,1:9;ugly_att:0,
1:10;

#standards: template (name:indeces,of,feelings:index of object;)
:standards
v_une_sta:2:0;une_sta:2:1;l_une_sta:2:2;neu_sta:2:3;l_ant_sta:2:4
;ant_sta:2:5;v_ant_sta:2:6;
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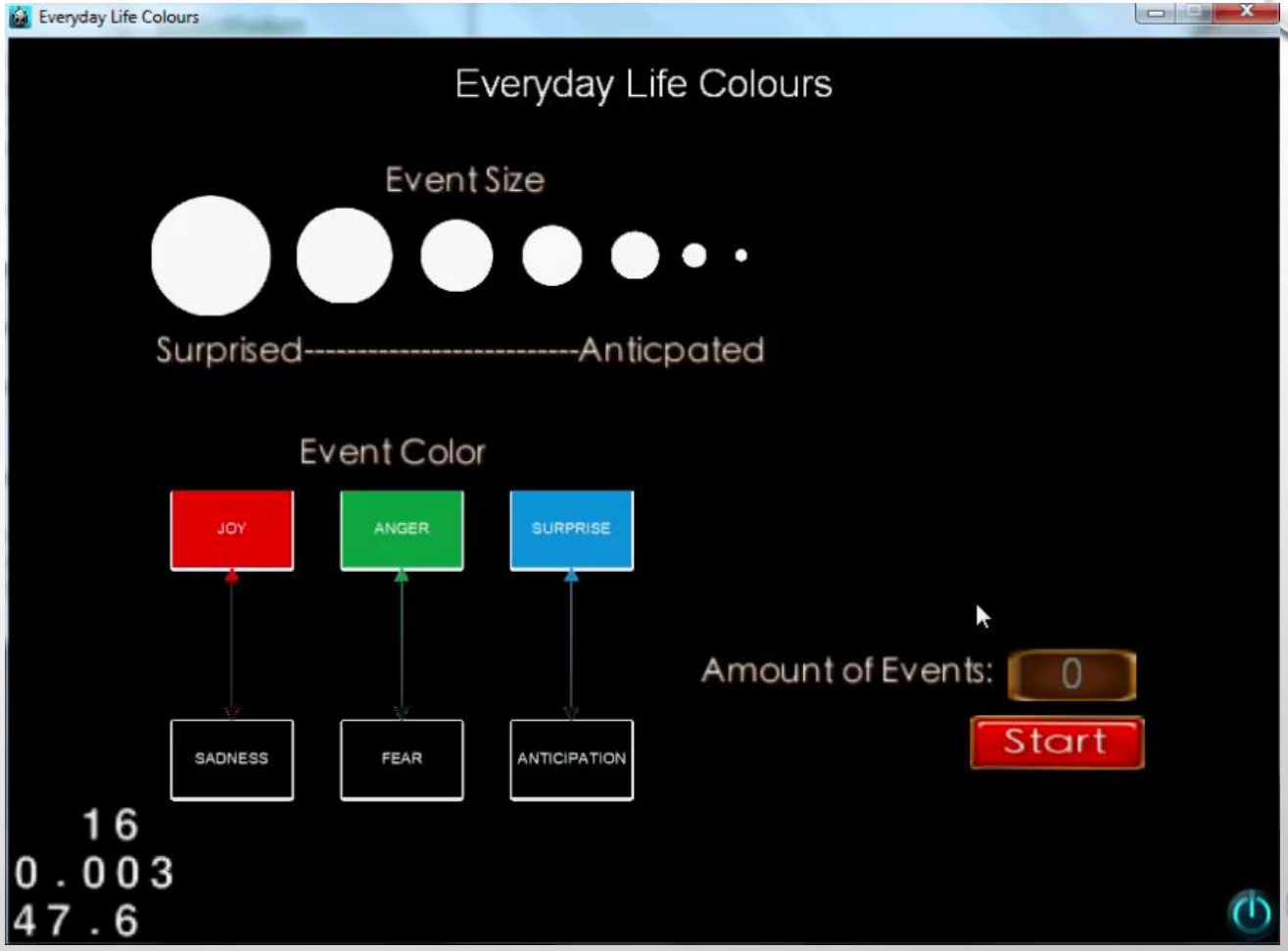
COLORS OF EVERYDAY LIFE

- RANDOM EVENTS „HITTING“ THE PERSONALITY.
- MOOD OF THE PERSONALITY DISPLAYED AS COLOR OF THE BACKGROUND.