## COLLECTIVE MIND

## STATEMENT AND STORYBOARD

My starting topic for this project was desire to explore the phenomenon of morning versus evening cognitive activity shifts in different individuals. I have been noticing that for some people, like myself, it is much easier to process information and come up with ideas in the afternoon or late at night whereas many other people claim to be much more productive in the mornings. In fact, it is culturally reinforced that those who get up early are more industrious and hard working, whereas those who go to bed late and get up late are somewhat lazy, unproductive, and all-round unreliable individuals.

This stigma has led to a situation where people are reluctant to admit being night owls almost if this were something shameful. Almost 100% of workspaces and educational institutions are designed to accommodate individuals who experience their cognitive and productive peaks in the mornings which does not necessarily reflect the actual need of the contemporary society and could be just inherited from earlier technologically limited (electricity, transportation, infrastructure) historical periods.

I would like to make this explorable space a reflection on "collective mind" that would help explore without judgement the objective situation around more productive parts of the day for the majority of individuals (or, perhaps, some specific aspects of this activity). I hope that this technique could potentially encourage employers readjust working conditions for their employees reflecting their needs to encourage as much productivity as possible without any negative impact on their motivation or general satisfaction levels. This approach could be potentially useful for creative domains requiring out of the box thinking and unconventional approaches as well as for scientific spheres requiring a lot of precision and concentration.

The application itself is going to consist of two main parts: collecting information from the user and the "collective mind" interface.

The first (Fig.1) part will prompt the user to answer a short series of questions involving logical and creative thinking as well as a question asking for the users general satisfaction/motivation level.

When the answers get submitted, they receive a time stamp which will help to group the data by time slots. When the data gets submitted, the user may enter the "collective mind" interface (Fig.2) that will consist of a single shape / creature who's state will directly reflect the collective data from all participating users.

Let's say that majority of users show high performance on logic questions in the first part of the day whereas the creative thinking performance is higher in the afternoon. In the same time the motivation levels are lower in the afternoon than in the morning. Depending on the time of the day, the "collective mind" avatar will change its shape, colour and opacity to reflect its state according to the information currently stored in the database (Fig. 3).

This way the users may discover that their personal biological clock is not that different from the average or, maybe, the opposite. In any case, they can afford being completely sincere since there is no log-in, no name and no other personal information required.

From the practical perspective, this could be an effective tool for employers to explore cognitive and creative dynamics in their teams to possibly adjust the work environment to accommodate those shifts. This doesn't necessarily mean change working hours, but could lead to some minor changes like, for example, rescheduling brain storm meetings from mornings to the afternoons etc.

The avatar itself is meant to represent the collective emotional state

of all its users and hopefully become a virtual pet / pot plant for them. The fact that this statistical information will not be displayed as rows of numbers but as a "living" thing that is, although just partially, consists of the user's emotional and intellectual state, hopefully, will create certain empathy. Through the changes in the avatar the users can witness the emotional daily changes of the whole community of their fellow users which in itself can be a powerful experience. It can both help feeling a part of a whole, being a part of this "collective baby" and also track how much this collective mood is reflective of an individuals state.

COLLECTIVE MIND	
QUESTION 1	
QUESTION 3	
SUBMIT	

Fig.1 User input interface



Fig.2 Collective Mind interface

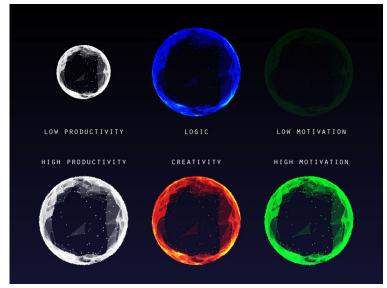


Fig.3 Possible states of the avatar

## **PRECEDENTS**

FRIENDS is a collective virtual pet installation from the Netherlands. It resides in a student housing complex and initially was meant to be an ice breaker for the new residents. It was installed in 2010 in this complex mainly because the architecture of it was favourable and some students felt that the building was too empty and "cold". The students (around 1000 of them) collectively take care of their virtual pet and in return can play with it when leaving or entering the building. The installation is a 24 square meters projection in the entrance hall of the student complex that interacts with its "owners" and consists of several creatures living in a bubble together. There are four coloured squares on the floor in the hall that, when stepped on, activate food supply to the virtual pet. If timed correctly, users can also create power ups that result in higher virtual pet satisfaction level. The happier the pets get the more of them are summoned. For the students who are not allowed to keep pets in the housing complex this virtual pet serves as a great stress relief and a source of playful enjoyment. On the other hand, taking collective responsibility for the although virtual but still interactive and dependable creature, bonds its owners.

MIMMI Twitter Mood Ring is an art project from two design groups, INIVIA and Urbain DRC. In 2013 when it was erected near the Minneapolis Convention Centre Plaza, the mood ring supposedly reflected the mood of Minneapolis. The mood ring itself was represented by a giant balloon that changed colours depending on the mood of the people below it. The mood was established on the basis of the tweets posted by the people and weather their contents was of positive or negative nature. The software was searching among the words on the list of positive and negative key words to determine if the given tweet was positive or not. Once the mood of a message was



deciphered, the software sent a signal to a series of WiFi enabled light bulbs inside the balloon structure which lead to the colour change. If general mood was positive, the balloon glowed in warm colours and produced mist, if the general mood was negative, the balloon adopted cooler shades and the mist stopped. The creators saw this project as an "emotional gateway" to the residents of Minneapolis. This project although in the most part technological, also highlights the importance of a collective effort and togetherness.



BRAINLIGHT is a synthetic project by Laura Jade from Sydney, Australia that combines neuroscience and illumination design. It is embodied in an interactive three feet human brain sculpture created from thin layers of plexiglass which lights up and changes colours in response to the information received from the EEG wireless headset. In her artist statement Laura writes: "To experience a unique visualization of brain activity and to share it with others I have created a large freestanding brain sculpture that is made of laser cut Perspex

hand etched with neural networks that glow when light is passed through them." The EEG helmet detects Alpha, Beta, and Theta brain waves and interprets them with blue, red, and green colours respectively. Blue colour, or Alpha waves, represent calm, introspectiveness, serenity, relaxed state of mind, mindfulness. Red light, or Beta waves, represent excitement, agitation, stress, alert, problem-solving activity. Green light, or Theta waves, represent creative state of mind, lack of focus, daydreaming, flow.

The sculpture itself not only shows what an individual wearing the EEG helmet feels at this particular moment, it creates a feedback loop, where the user reacts to the sculpture and this reaction is immediately translated into light and reflected back to them by means colour change. This interaction creates a certain intimate relationship between the user and the art piece and possibly makes one reflect on what it takes to change their mental state, how unstable and non-linear these changes may be.



## **CONCLUSION**

I find all of these three projects very interesting and exciting in very different ways. I would like to think that my future project will combine elements of all three. I really like the idea of collective ownership of a virtual pet of the "Friends" project but instead simply playing with or feeding their pet, "Collective Mind" users are meant to actually invest themselves, their thoughts in order for the pet to develop correctly which means that each of the pet owners will be a part of this pet. The idea of a technological mood ring of the "MIMMI" project feels engaging and playful but also capable of pointing out some otherwise unrecognized trends. "Collective Mind" is designed not to indicate general positivity / negativity, but actually isolate certain specific aspects of psyche manifestation in response to certain factors. The illustrative nature of very personal processes of the "Brainlight" project shows that things that sometimes cannot be described with words, slight changes in the neural activity can actually be captured and manifest through media which can lead to their further investigation. "Collective Mind", hopefully, will serve both as a collective psyche state reflection and, possibly, as means for its further improvement.