MIMODEK systematic description

Element:	
ACTIVE MIMO	
Active mimos are created by the presence of life agents(people, animals)at the plaza. They follow participants movement and react to their behavior. (see "reactivity") Their existence is finished when a)tracking looses the participant(active mimo becomes dead mimoI.) b)the participant wanders off the tracking area (active mimo becomes dead mimo II.)and later becomes part of the ancestor structure.	
Parameters:	
appearance	Colored gradient circular shapes
color	the color of each mimo is different from the colors of other present mimos. It can be randomly chosen from a defined selection of colors. The selection can be related to some conditions(as temperature or social data)or not //define
size	Depends on the time the participant spend at the Plaza. The process of growth need to be defined yet.
shape	Approximately dynamically changing circle (like metaballs idea). The shape gets affected by various stimuli (see "reactivity")
movement	Essentially follow the participant. It is affected by various stimuli (see below)
Reactivity:	
Stimuli	**Response**
Movement of the participant	movement/ follows
Time	size/ grows bigger longer the participant stays at the Plaza
Proximity between the participants	shape/ changes shape-stretches towards each other
Sudden changes in the velocity of participant's movement	movement/ bounce a bit when participant suddenly speeds up their movement
Air pollution	Shape/ irregular edges//test, define if the pollution gets over permitted limit

Dead mimo I.	shape/ Active mimo can absorb it and becomes binary cell in result.
Social data(holidays, rush hours and so on)	//to define yet probably movement

Element:
DEAD MIMO I.
Dead mimos I. are created by the “lost tracking” of the participants. They look like cluster of light. (or light circle - needs testing) They are formed by some morphing process //define from the active mimos. By the time, they are loosing energy(and their nutritional value)– it is represented by reduction of brightness and size. They move along random path, but very slowly, they are like floating. Apart of this they don't have any specific behavior Their existence is finished either by them wandering away from the screen, or they get absorbed by active mimos, or their brightness and contrast get reduce to the extend that they vanish. They can't be absorbed by the ancestor structure.
Reactivity:

Stimuli	**Response**
Active mimos	The End / Active mimo absorbs the dead mimo.
Time (how log the dead mimo exists)	Size, brightness/ Longer the mimo stays it's size and brightness get reduced. //need defining

Element:	
DEAD MIMO II.	
Dead mimos II. are created by participant wandering off the tracking area. They look like cluster of light. (or light circle - needs testing)-same like dead mimos I. But they have more complex behavior than I. They “carry” data of the active mimo they came from, and pass this information to the ancestor structure. It is in particular: shape and size of active mimo. They are formed by some morphing process //define from the active mimos. By the time, they are loosing energy(and their nutritional value)– it is represented by reduction of brightness and size. Their movement is basically random, but gets affected by various stimuli.(see below) Their existence is finished either by them getting absorbed by ancestor structure (when the dead mimo II. touches the structure it will become one of its cells-ancestor mimos, true some morphing process //need defining and pass to the ancestor the information it's carrying.)or their brightness and contrast get reduce to the extend that they vanish. They can't be absorbed by the active mimos.	
Reactivity:	
Stimuli	**Response**
Time	size/brightness Longer the mimo is on the screen less bright and smaller it gets
Air temperature	When the temperature exceeds certain limits (lets say below 5 and above 30C)the velocity of dead mimos II. movement is slowed down.
Social data(holidays, rush hours and so on)	?movement?or maybe dead mimos shouldn't react to these data? //need defining
Active mimos	Movement-repel/ active mimos repel dead mimos II.
Ancestor structure	movement-attract/ Essentially, dead mimos II. are attracted to the ancestor structure.

Element:	
ANCESTROR MIMO	
Ancestor mimos are created from dead mimos II. They are “cells” of the ancestor structure based on a DLA algorithm. During its existence the size of the mimos will reduce. If, even the scale down structure would be overcrowding the scree., the mimos will start dying out – via the same shrinking process they did in the old mimodek.	
Parameters:	
appearance	colored gradient (approx)circles
color	the color of each mimo is based on the temperature during the moment the dead mimo becomes the ancestor.
size	Depends on the size of active mimo it was created from. They scale down the size by certain ratio // need defining
shape	It has the shape of active mimo it was created from only scaled down (“size”)
movement	Each mimo has some kind of motion as an individual. It is affected by various stimuli (see below) // needs defining
Reactivity:	
Stimuli	**Response**
Air Temperature	color/ In the moment when the dead mimo II. morphs into ancestor the system checks the air temperature and the color of the mimo is based on it. Color ranges based on the same system we have in the old mimodek. movement/ When the temperature exceeds certain limits (lets say below 5 and above 30C)it slows down the movement of the ancestor structure. It can be on cellular level and as a whole structure too.
The amount of ancestor mimos in the structure	Size //needs to be defined Mimos will be shrinking. (This is a process when the structure will be scaling .I think the aim is to have as many nodes(mimos)as possible without the screen

	getting overcrowded. If needed, mimos will start dying out(by shrinking process we used before))
Social data(holidays, rush hours and so on)	Probably movement on cellular level //define
Element:	
ANCESTOR STRUCTURE	
Ancestor structure is based on a DLA algorithm. The structure is created from the residues ;-) of participant's who visited the plaza. (Active mimo-> dead mimoII. -> ancestor mimo). The initial condition of it's creation is: When the installation is running for the first time(=there isn't any ancestor structure yet)it waits until first participant leaves the area and creates a seed of the structure at that point it further waits another 3min(let's say) and if anyone else leaves during this time, they will create another “seeds”. From that moments onwards mimos will be joining already existing seeds(structure)) In the case that there is more DLA they are not sharing any cells. They can be tangled together but their mimos remain separate. By the time the structure will be scaling dynamically, so it can have much more nodes and really reveal it's beauty. //define , if necessary cells can also be dying so to prevent overcrowding	
Parameters:	
appearance	DLA based structure formed of individual mimos
color	the color of each mimo is based on the temperature during the moment the dead mimo becomes the ancestor.
size	
shape	
movement	movement of the whole structure shall be gentle -flowing-see wheat or plant like. (as the videos of growing mushrooms we watched during OpenUp)It's affected by various stimuli. // needs defining
Stimuli	**Response**
Air Temperature	movement/ When the temperature exceeds certain limits (lets say below 5 and above 30C)it slows down the movement of the ancestor structure.
The amount of ancestor mimos in the structure	Size, form of the structure/ //needs to be defined this is a process when the structure will be scaling .I think the aim is to have as many nodes(mimos)as possible without the screen getting overcrowded. If needed, mimos will start

	dying out(by shrinking process we used before)
Rain	Form of the structure/ it curls up when raining . The level of curling can depend on the rainfall.
Social data(holidays, rush hours and so on)	Maybe affect the movement of the whole structure too //needs defining
Active mimos	Movement-repel/ the ancestor structure moves away from the active mimos
Dead mimosII.	Movement-attracts/ The ancestor structure moves towards the dead mimos II. When it touches it, the dead mimo will join the structure and morph into -feed the ancestor mimo.