



FUNCTION
DESIGN

FUNCTION DESIGN



According to the solutions which present before to design the function of the expectations. Do some research to get the foundation of these function. And verify feasibility of these function.

Function Clarification



According to the research in the last chapter, the keys of grow succulent plants are sunlight, watering, temperature and protection.



WATERING



SUNLIGHT



TEMPERATURE



PROTECTION

Water of Succulent

All the succulent plants has period of dormancy, some in the summer and the other in the winter. The water demand in growing period is:

65% ~ 75% RH



Watering



SUNSHINE

Sunlight for Succulent



According to the tesearch, the sun is very important for succulent, if the sun is not enough the plant will grow higher to get more photosynthesis. And become ugly. And a lot people put their plants on their desk where is lack of sunshine. So the supplementary lighting source is necessary.
The best lighting for the succulent is:



5 ~ 7 hours a day
30000 ~ 60000 lux

Temperature for Succulent



Temperature is very important for succulent.
If the temperature is too hot or too cold the
succulent will stop grow even died. So the
perfect temperature for succulent is:



18 ~ 28°C at daytime
10 ~ 18°C at night





Because the succulent often be put on the desk, so if the grower will broke the leaf by accident. Or if the plant be put on the balcony, birds and bugs will eat it. So that, the succulent need a protective cover.



Protection for Succulent

And sometimes, the grower want to touch and observe their plant closely to know the health condition of the succulent. So the protection cover need to be removable.



The Habits of Common Succulent Plants



Buddha Bead



Peach



Star



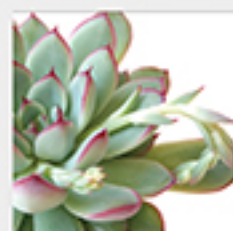
White Peony



Black Mage



Sedum Rubrotinctum



Echeveria Pulidonis



Blue Pine





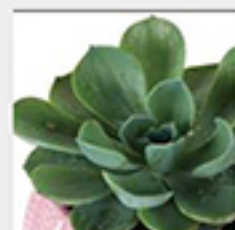
Campfire



Silent Night



Baby Bear



Echeveria Secunda



Lilacina



Astridia Velutina



Rabbit Ear



Sedum Adolphii



Gyokuro



Function Setting



After these research, considering the need of target user and the habits of succulent plants, the function is designed.



WATERING

Automatic watering plants.



SUNLIGHT

Simulate the sunlight.



TEMPERATURE

Control the temperature.



PROTECTION

Detachable protective cover.