

- **Customer Requirement: The system should be accurate.**
 - Engineering Requirement: The system clock should be less than 1 minute off every hour.

<https://youtu.be/iryVrjOxJSc>

- **Customer Requirement: The system should be secure.**
 - Engineering Requirement: The system should have a locking mechanism that withstands at least 30lbs of force.

<https://youtu.be/iryVrjOxJSc?t=215>

- **Customer Requirement: The system should open without human input.**
 - Engineering Requirement: The system door should be automatically opened by a pet without human input at least 4 out of 5 times.

<https://youtu.be/iryVrjOxJSc?t=279>

- **Customer Requirement: The system should be user programmable.**
 - Engineering Requirement: The system should allow the user to set at least 4 lock/unlock times per day.

<https://youtu.be/iryVrjOxJSc?t=373>

- **Customer Requirement: The system should monitor usage.**
 - Engineering Requirement: The system should automatically record the day and time that a pet enters or exits for at least 7 days.

<https://youtu.be/iryVrjOxJSc?t=510>

- **Customer Requirement: The system should allow the user to determine how long the door will remain open to adjust to the pet's preference.**

- Engineering Requirement: The system will take a user input in the range of 5-20 seconds to determine how long the door will be open for.

<https://youtu.be/iryVrjOxJSc?t=664>

- **Customer Requirement: The system should be overridable**

- Engineering Requirement: The system should allow the user to enter manual mode where it takes inputs on lock/unlock from the “inside” of the door. In manual mode, it will no longer lock/unlock with the programmed time periods. It will take less than 3 seconds for the door to lock/unlock with the manual inputs.

<https://youtu.be/iryVrjOxJSc?t=778>