**ABSTRACT**

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In our nation, sanitation has always been a major issue. Most significantly, this issue is not

just concentrated to the rural areas but is also wide spread in urban and semi urban areas.

People do not show the same level of concern when it comes to keeping the public sanitation

systems clean as they show towards the ones at their homes. Right to good health and

sanitation is one of the goals to be achieved as per the Millennium Development Goals of the

United Nations Organisation, 2000.

However in India, the scenario of public toilets is still dismal. One of the reasons for this is

that the people do not bother to clean up after they use the toilet. These places are thus the

breeding grounds of bacterial germs like Escherichia coli and many deadly diseases. Many

people sometime prefer discomfort to using these toilets.

Looking at such troubles, the decision to construct a self flushing toilet was made that simply

utilizes the weight of the person using it as its working mechanism. The system consists of a

platform supported on springs and the lever arrangement that flushes after use. The lever is

pivoted in such a way that it will lower itself when weight is applied downward and when the

load is released, this will strike the flush and hence in this way water is flushed out to clean

the toilet. The design is robust and cost effective. Sensors or any kind of electrical transducers are not

required in the construction of these toilets. As the old saying goes "cleanliness is next to

godliness", this is a public welfare project which aims to propagate a cleaner and hygienic

society and hence, take our nation to the heights of glory.

**EXISTING SYSTEMS**

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Some automatic flushing systems do exist in the market, but they are too

expensive due to their complex construction. They generally use some optical or

electrical sensors to detect the presence of a person using the toilet and accordingly

they operate. They are found to be used in airports, shopping malls, multiplex etc. But

their use in the public toilets is not possible due to the excessive cost and frequent

maintenance.

DRAWBACKS OF EXISTING SYSTEMS

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Battery maintenance

Sensor requirement

Costly

**Problem solution**

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During the course of study, we came across various kind of toilet flushing Project. The first project entitled „Electronic Cistern Flushing‟ in which the flushing Is activated by electronic, pneumatic buttons or infrared sensors.

The second project entitled „SCPK Flushing Package‟ [2] in which the flushing

is activated by piezo or infra-red buttons.Hence there is no such mechanical project that works complete automatically without electric power or sensor

**DESCRIPTION OF PARTS USED**

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The various essential parts that make the system run are:-

Cistern

Platform or Base

Supporting Stand

Coil Compression Sofa Spring

Striking Lever with a Rubber at the End

**Cistern**: - The modern water closet or toilet utilizes a device to reserve and hold the

Correct amount of water required to flush the toilet bowl called cistern.

Design Considerations: Modern toilets use 6 to 9 L per flush, whereas older models

were designed for flush water quantities of up to 20 L. There are different low-volume

flush toilets currently available that can be used with as little as 3 L of water per

flushThe tank contains some important parts which need to be described to

understand the working of a cistern.

**Handle or button:** Its basically is a switch provided on the tank to flush when Required.

Inlet valve: The inlet valve controls the water supply coming into the tank. It lets

Water in when the tank is empty, and stops water coming in when the tank is full

**Float ball and float rod:** The float ball rises as the tank fills with water. As it rises,

The float rod attached to it presses against the inlet valve. When the tank is full, the

Rod is pressing against the inlet valve hard enough to turn the water off. This stops the

Tank from overflowing

Finally the tank empties quite quickly, and the float ball floats to the bottom.

That Means the float rod is no longer pressing against the valve, so water begins to flow into the

Tank, filling it up again. The water which left the tank cleans the bowl and carries the waste

With it to the septic tank.

