

**Fuelbot- The fuel filling Robot
to ease our life**

Manual fuel filling

While driving through New Jersey, I noticed that at most of the fuel stations, manual mode of fuel filling is prevalent.



I Imagined...

What if a robot
does that for
you?



Interesting..!!!
Right..??

Fuelbot can relieve
people from this
tedious task



And of course...

Manual fuel filling is
boring



How Fuelbot came into existence?

Being interested in robotics, an instant thought strike my mind. After putting great sum of efforts, it has finally taken the shape of a live robot that proficiently does the task of fuelling of cars.



Source of motivation

As the inventor of Fuelbot, I take the pride in sharing my source of inspiration in achieving my goals and transforming my dream into reality



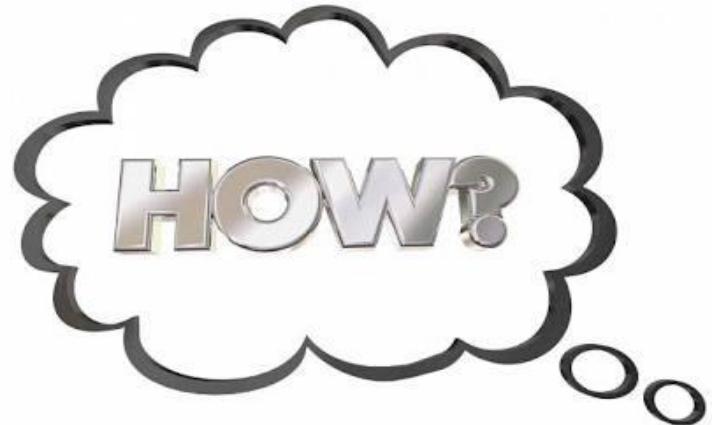
How it started...

My father used to encourage me to play around with spare vex parts we had, in order see how would I make such a robot.

Practical implementation

The innovative thoughts and experiences lead to the practical implementation of Fuelbot.





I did off my own creativity and through the experiences I gained in the Vex Robotics Competition Program.

Sources for the development?

When it came to the Model I created I was able to use firsthand experiences



Ideas and Thoughts...

However, many times I would make propositions about how an actual Fuelbot would work



I used to think about how each aspect would work!

I would do research on the internet about what kind of sensors were available in hope of understanding how a real robot could be fully- automated.

Technology used

- Vex Cortex based microcontroller
- It is operated by VEXnet Joystick to control the movement of the robot wirelessly.



Controlling

It is currently controlled completely by either the remote control or by an autonomous function that I created using the program RobotC (a variant of C)

Cost incurred in its Development

The entire Robot is probably worth
between \$400 - \$500

It is a one time investment, that is
determined to pay off the efforts and
money in the coming years

I would like to enumerate the advantages Fuelbot would provide the world with...

- Easy
- Efficient
- Environment friendly
- Accurate
- Reliable



Convenient

- Prevents human contact with dangerous fumes
- Tend to avoid driver's exposure to extreme hot/ cold temperatures during fuelling



Few more advantages

- Easy to transport
- Long term investment
- No additional constructional activities and cost
- Automatic Mechanical process
 - Low maintenance
 - Mess free
- Reduces labour cost

Optimal Performance

- Theft proof
 - High speed
- Time-efficient
- Spill/ Leak proof
 - Risk proof
- 365*24*7 available
 - Fraud free
 - Adulteration free
- Optimal performance

A list of things manual fuel filling irritates with

- Time consuming
- Tedious/ boring
- Inaccurate/ prone to errors



SAFETY ISSUES

- Not safe as the person filling fuel gets exposed to dangerous hydrocarbon vapours



HEALTH ISSUES

- Causes
Respiratory problems and other health issues



ADDITIONAL DISADVANTAGES

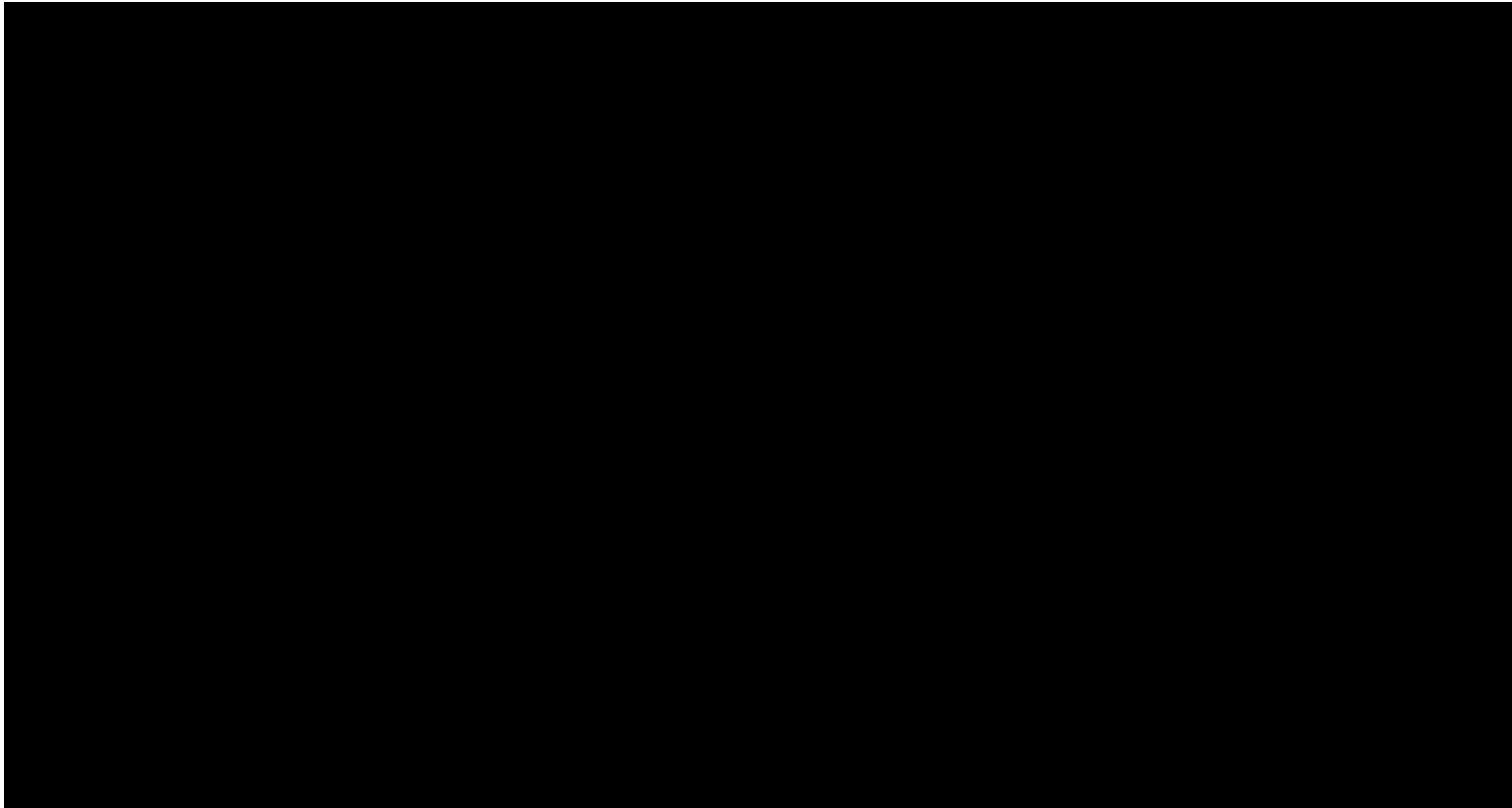
- Track systems / logs is essential
 - Spilling incurs additional cost
- Need to manage sites/ infrastructure
 - Staffing problem

And some more.....

- Maintenance
- Adulteration
- Prone to risks
- Wear and tear

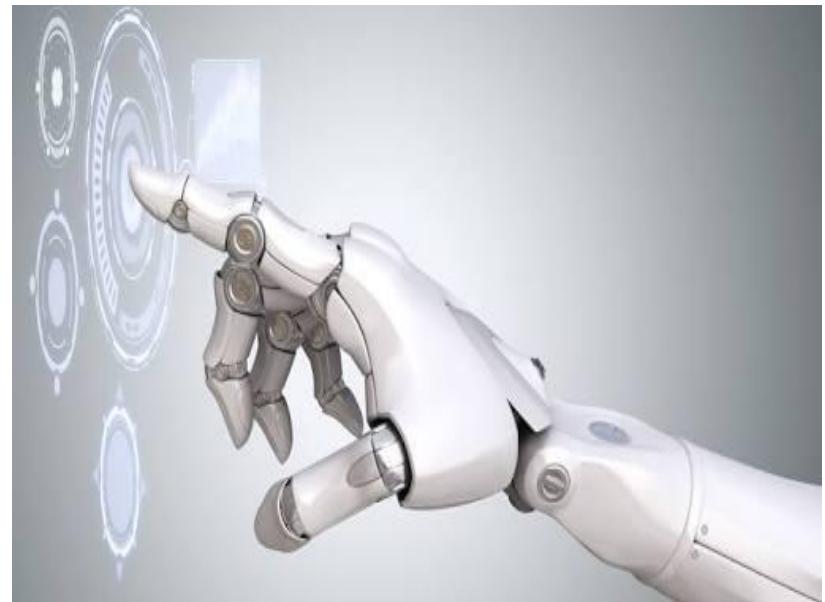


**Here, I am presenting the world
with the robot itself- Fuelbot**



Please note.....

It is very important to note that what I have developed, however, is a mere concept of what an actual Fuelbot could be like.



Fuelbot is Still in its Developing Phase

This is in no way a finished product but the beginning of a new project that I can hopefully pursue in the future..



FUTURE PLANS

I have many plans and possible ideas for this project that could be implemented in future.