Team number 12
Re-plantation

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Problem Statement

Using Fire Bird V to design a bot for re-plantation of plants at specified distance.

Requirement Specification & Implementaion

- FB5
- Image processing to find actual plant(camera) from any random location.
- pick the plant after finding its location(by a moving arm)
- Locating the spot for plant re-plantation

Requirement specification & Implementaion

- Dig a hole at that position(by another moving arm)
- Put plant at that position.
- Coming back to pick another plant.

Issues encountered

- Installation of opencv in ubuntu and mingw in windows.
- Image processing in scilab is difficult as it need re-run every time.
- Random distance generated by IR sensors
- Slipping of wheels during movement.

Insights gained

- Get to learn image processing and serial communication in scilab.
- Communication through xbee.
- Problems occurred due to use of hardware
- Working of Fire Bird V

Future work

- Improving image processing as we are detecting plants on the basis of size.
- Digging a hole for plant before planting.
- Using a container for collecting plants to reduce unnecessary robot movement.

THANK YOU

Q &
A