

## **Title: Remote Controlled Armed Car**

- Project members:

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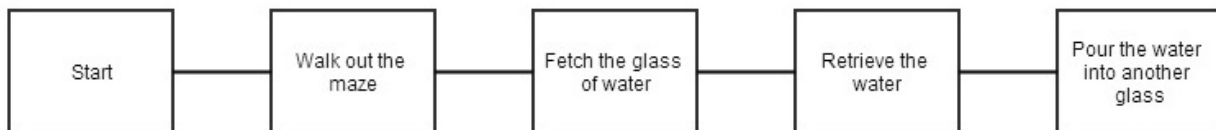
- Abstract:

We are going to build a remote control car that have a machine arm on it. We can use the “hand-gesture sensor” to give command to the car and then make it move and do some special tasks such as stuff fetching or water pouring. Also, our car can be controlled by mobile APP and the fuction shall be more than the hand-gesture sensor. Apart from the basic ability that the gesture sensor supports, mobile APP can do more service routines, for example, alarm clock, close light etc.

- Overview:

Our car will need a machine arm, a remote control car, two “hand-gesture” sensors. As for mobile APP, the environment will be Android system. Gesture sensors are used to control the movements of machine arm and car separately. The programming language we will use to implement car/arm controlling and gesture recognition shall be C.

- Block Diagram:



- Functionality:

1. Be able to reach the destination of a maze by using the obstacle detector.
2. Use arm gestures to remotely control the machine arm to fetch the glass of water.
3. Retreive the glass and pour the water into another glass.
4. Use APP to perform certain routines. EX: Use the machine arm to wake you up on specific time.

Task division:

邱名彰：機器手臂 手勢辨識

孫晨瑄：同上

謝宜君：搖控車 手機APP