

Final project write-up

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Project name: Rescue Survivor

Demo vedio:

<https://drive.google.com/open?id=1eqnOvHFn0FHjpJvlEwpIjRKekSIbS>

OOp

Change from the project proposal: At the proposal we planned to design a robotic arm to get drink. But later we decided to use sparki. And rescue the survivors basically is the same idea compared to getting drink. They all need blue tooth to send command to sparki, and sparki process the command and make reaction.

Description: we design a project that using sparki to rescue survivors in a given world map. In the laptop side, we have a world map and we came up with some locations of survivors and fire blocks. Then we use BFS to do path-planning. By blue tooth, the laptop would send the results as the command to control the sparki to go to the locations of survivors to rescue them. In the sparki side, sparki would process the incoming command and return “ok” if the sparki successfully receive the command. In our interface, we can see the whole process of the sparki movement and we can also update the number of fire blocks and number of survivors.