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ATW1505

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**ATW Capstone Project Proposal**

For our capstone project we intend to create laser tag that can be played between two players.

Main Features:

* Three arduinos interacting with one another through nRF24L01+ data transceivers.
  + Two arduinos will act as players and control the ir emitter and ir detector.
  + One arduino will act as a hub that controls the game and the connection to the browser.
* The player will have a water gun fitted with an ir emitter and a button that will fire ir beams towards the other player.
* The player will also wear a vest that will house one arduino and an ir receiver to recognize hits.
* The hub will keep track of player’s health. This information will be pushed to the browser and monitored from there.
* When a hit is registered on the vest it will be sent to the hub from there the appropriate amount of health will be removed from the player’s health. When a player’s health reaches zero they lose and the other player wins.
* These stats will be reflected in the browser for the user to view.