

## Elevator Project by XATM

- Elevator monitoring system that tells which floor the elevator is at, the current speed and direction the elevator is going at, and, which floor the elevator is currently at and can detect whether the elevator is between floors. Also, on elevator BBG controls and monitors the lighting system
- What has accomplished so far:
  - Done research on current practices on elevator monitoring system
    - Searched through Alibaba and found that industrial IR sensors can sense up to 150 m (well beyond our expectation) which costs only about \$100 per unit
      - Will use IR sensors to detect floor level (one on the top of elevator and one on the bottom)
  - Built a 1m height elevator shaft out of 2x4s. The elevator module is hanged in the shaft via strings to simulate tilt and acceleration
  - Obtained IR sensors and Bluetooth module, configuration is being done collaborated by team members via GitLab: [git@csil-git1.cs.surrey.sfu.ca:xamt/finalProject.git](https://git@csil-git1.cs.surrey.sfu.ca:xamt/finalProject.git)
- Came up with schematics of the overall system

