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ECE 342: Junior Design II

### System Testing Videos

#### *Default Requirements*

- **Customer Requirement:** The system should be accurate.
  - **Engineering Requirement:** The temperature readings should be within +/- 1 degrees Fahrenheit of a standard thermometer.
  - **Testing Video Link:** [https://youtu.be/V7ZbVuq3\\_I](https://youtu.be/V7ZbVuq3_I)
- **Customer Requirement:** The system should alert the user when they have a fever.
  - **Engineering Requirement:** The system should indicate via sound and a display when the recorded user temperature is greater than or equal to 100.4 degrees Fahrenheit.
  - **Testing Video Link:** <https://youtu.be/gu2ugfwbNfk>
- **Customer Requirement:** The system should require no contact to function.
  - **Engineering Requirement:** The system should be controllable by the user from a distance of 1 cm or greater with no contact.
  - **Testing Video Link:** [https://youtu.be/STKEt9\\_xWqs](https://youtu.be/STKEt9_xWqs)
- **Customer Requirement:** The system should log user information.
  - **Engineering Requirement:** The system should automatically record all users and their temperature for the last 24 hours.
  - **Testing Video Link:** <https://youtu.be/Sg5hVsK7o50>
- **Customer Requirement:** The system should be intuitive.
  - **Engineering Requirement:** The system should be usable with no outside instruction for at least 2 people other than the project designers.
  - **Testing Video Link:** <https://youtu.be/57I9eBAs6uM>

#### *Additional Engineering Requirements*

- **Engineering Requirement:** The system should be controlled via a QR code which will allow the user to input information and convert the output between fahrenheit to celsius for international use.
  - **Testing Video Link:** [https://youtu.be/STKEt9\\_xWqs](https://youtu.be/STKEt9_xWqs) (repeat video)
- **Engineering Requirement:** The system should record all user information including recorded temperature onto an external database.
  - **Testing Video Link:** <https://youtu.be/Sg5hVsK7o50> (repeat video)