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Team: The Raiders

Individual Work Package

- Setup System to compare sensor data to isolate strong impacts
  - Build a catalogue of impact recordings from various angles and weights to reference
  - Build program to compare graph from the sensor readings back to the reference catalogue
  - Need to research into the programming libraries used by the accelerometer and microcontroller
- Setup ChirpStack to implement LoRaWAN capabilities
  - Register device with ChirpStack to be able to connect to LoRaWAN gateways
  - Test sending data packets to LoRaWAN gateways
  - Need to register the end device and test ChirpStack features
  - Need to ensure data packets follow LoRaWAN regulations
- Evaluate/Organize storing collected data
  - Test the available data storage methods included with ChirpStack
  - Look into additional storage capabilities outside of ChirpStack with user-friendly interfaces
  - Need to compare different data storage methods to see if storage outside ChirpStack will be needed
  - Need to ensure information can be easily read by the device users
- Setup capabilities for app notifications
  - Design a simple app that could send coaches/staff notifications for dangerous impact
  - Notification would include the player's number and the impact reading from the device
  - Need to research the programming language needed to make an app that can support different branded devices